CHAPTER 4

Basic Challenges of Organizational Design

Learning Objectives

If an organization is to remain effective as it changes and grows with its environment, managers must continuously evaluate the way their organizations are designed: for example, the way work is divided among people and departments, and the way it utilizes its human, financial, and physical resources. Organizational design involves difficult choices about how to control—that is, coordinate organizational tasks and motivate the people who perform them—to maximize an organization's ability to create value. This chapter examines the challenges of designing an organizational structure so that it achieves stakeholder objectives.

After studying this chapter you should be able to:

1. Describe the four basic organizational design challenges confronting managers and consultants.
2. Discuss the way in which these challenges must be addressed simultaneously if a high-performing organizational structure is to be created.
3. Distinguish among the design choices that underlie the creation of either a mechanistic or an organic structure.
4. Recognize how to use contingency theory to design a structure that fits an organization's environment.

Differentiation

Differentiation
The process by which an organization allocates people and resources to organizational tasks and establishes the task and authority relationships that allow the organization to achieve its goals.

Division of labor
The process of establishing and controlling the degree of specialization in the organization.

As organizations grow, managers must decide how to control and coordinate the activities that are required for the organization to create value. The principal design challenge is how to manage differentiation to achieve organizational goals. **Differentiation** is the process by which an organization allocates people and resources to organizational tasks and establishes the task and authority relationships that allow the organization to achieve its goals.[1] In short, it is the process of establishing and controlling the **division of labor,** or degree of specialization, in the organization.

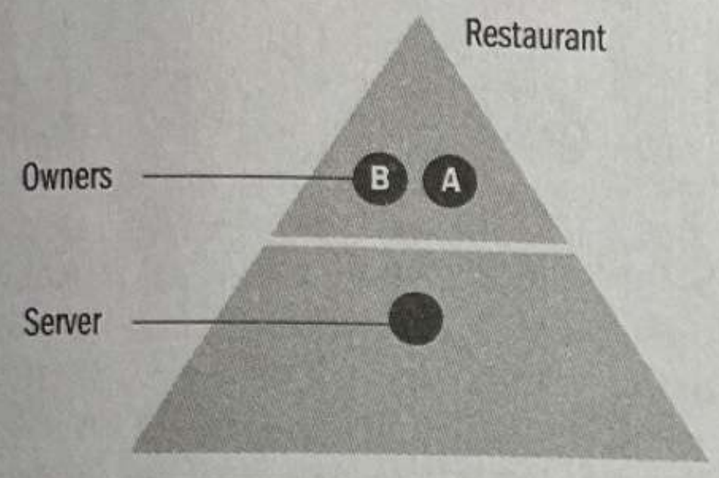
An easy way to examine why differentiation occurs and why it poses a design challenge is to examine an organization and chart the problems it faces as it attempts to achieve its goals (see Figure 4.1). In a *simple* organization, differentiation is low because the division of labor is low. Typically, one person or a few people perform all organizational tasks, so there are few problems with coordinating who does what, for whom, and when. With growth, however, comes complexity. In a *complex* organization, both the division of labor and differentiation are high. In Organizational Insight 4.1, the story of how the B.A.R. and Grille restaurant grew illustrates the problems and challenges that organizational design must address. As the B.A.R. and Grille changed, its owners had to find new ways to control the activities necessary to meet their goal of providing customers with a satisfying dining experience.

The basic design challenge facing the owners of the B.A.R. and Grille was managing the increasing complexity of the organization's activities. At first, Bob and Amanda performed all the major organizational tasks themselves, and the division of labor was

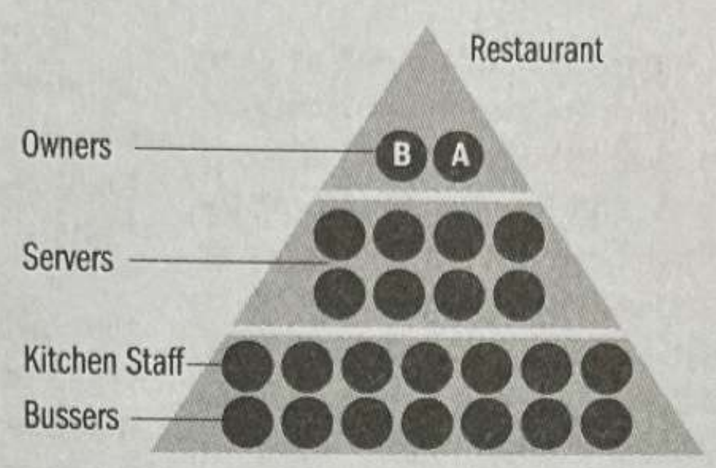
Figure 4.1 Design Challenge

Differentiation at the B.A.R. and Grille.

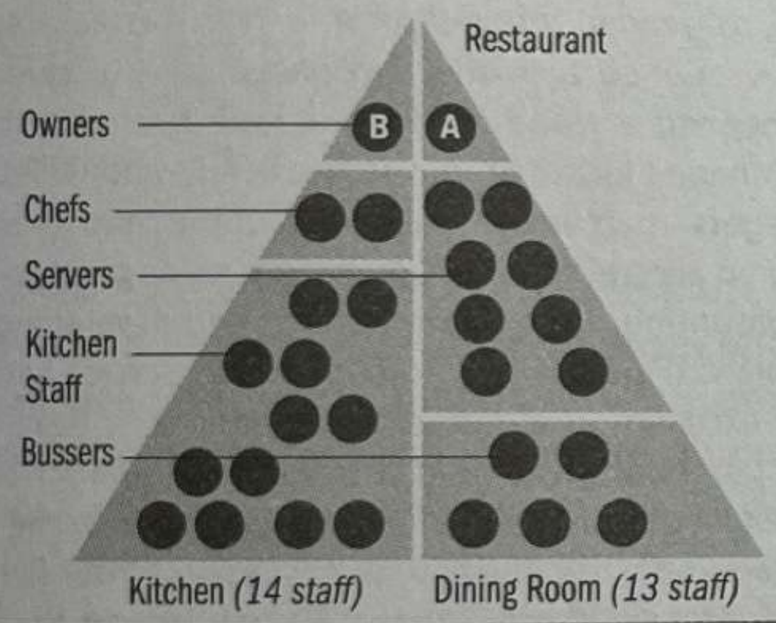
A. Bob and Amanda, the owners, cook and wait tables as needed. They employ one additional server.
(3 individuals in the organization)



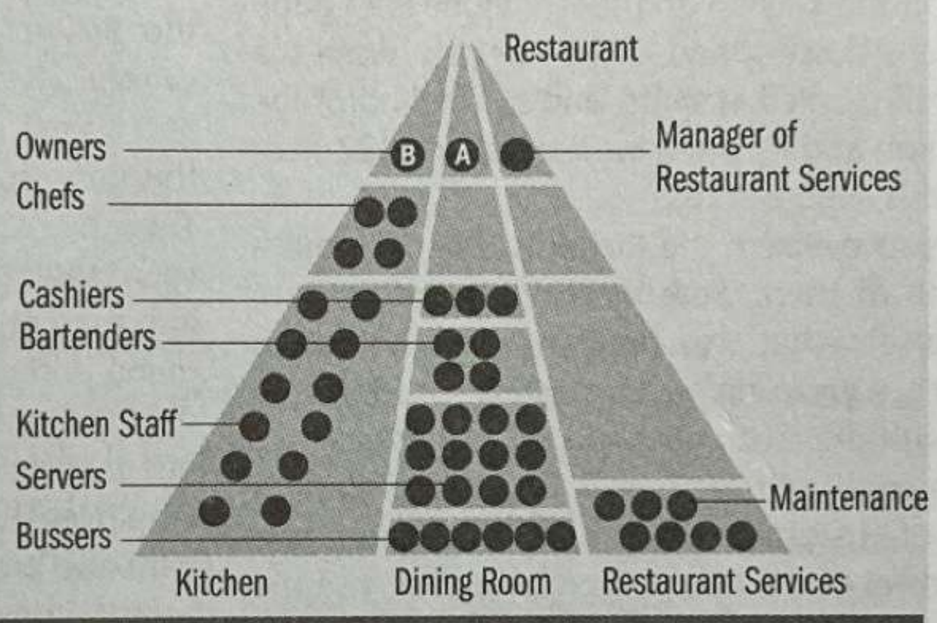
B. Bob and Amanda work in the kitchen full time. They hire servers, bussers, and kitchen staff.
(22 individuals in the organization)



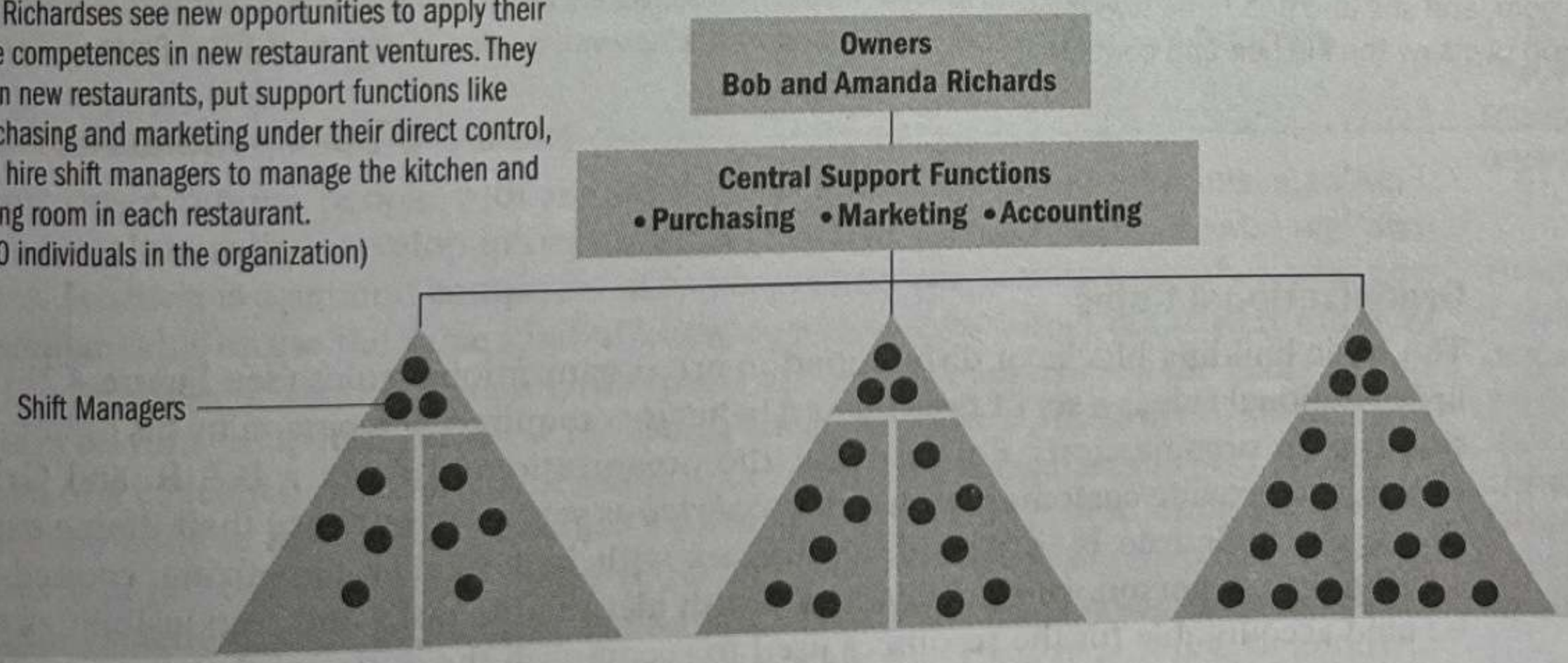
C. Unable to manage both the kitchen and the dining room, they divide tasks into two functions, kitchen and dining room, and specialize. Bob runs the kitchen, and Amanda runs the dining room. They also add more staff.
(29 individuals in the organization)



D. The business continues to prosper. Bob and Amanda create new tasks and functions and hire people to manage the functions.
(52 individuals in the organization)



E. The Richardses see new opportunities to apply their core competences in new restaurant ventures. They open new restaurants, put support functions like purchasing and marketing under their direct control, and hire shift managers to manage the kitchen and dining room in each restaurant.
(150 individuals in the organization)



low. As the volume of business grew, the owners needed to increase the division of labor and decide which people would do which jobs. In other words, they had to differentiate the organization and allocate people and resources to organizational tasks.

Design Challenge 1

People in this organization take on new tasks as the need arises, and it's very unclear who is responsible for what, and who is supposed to report to whom. This makes it difficult to know who to call on when the need arises and difficult to coordinate people's activities so they work together as a team.

Organizational Insight 4.1

B.A.R. and Grille Restaurant

In 2004, Bob and Amanda Richards (hence B.A.R.) trained as chefs and obtained the capital they needed to open their own restaurant, the B.A.R. and Grille, a 1950s-style restaurant specializing in hamburgers, hot dogs, french fries, fresh fruit pies, and fountain drinks. At the beginning, with the help of one additional person hired to be a server, Bob and Amanda took turns cooking and waiting on tables (see Figure 4.1A). The venture was wildly successful. The combination of good food, served in a "Happy Days" atmosphere, appealed to customers, who swamped the restaurant at lunchtime and every night.

Right away Bob and Amanda were overloaded. They worked from dawn to midnight to cope with all the jobs that needed to be done: buying supplies, preparing the food, maintaining the property, taking in money, and figuring the accounts. It was soon clear that both Bob and Amanda were needed in the kitchen and that they needed additional help. They hired servers, bussers, and kitchen help to wash the mountains of dishes. The staff worked in shifts, and by the end of the third month of operations, Bob and Amanda were employing 22 people on a full- or part-time basis (Figure 4.1B).

With 22 staff members to oversee, the Richardses confronted a new problem. Because both of them were working in the kitchen, they had little time to oversee what was happening in the dining room. The servers, in effect, were running the restaurant. Bob and Amanda had lost contact with the customers and no longer received their comments about the food and service. They realized that to make sure their standards of customer service were being met, one of them needed to take control of the dining room and supervise the servers and bussers while the other took control of the kitchen. Amanda took over the dining room, and she and Bob hired two chefs to replace her in the kitchen. Bob oversaw the kitchen and continued to cook. The business continued to do well, so they increased the size of the dining room and hired additional servers and bussers (Figure 4.1C).

It soon became clear that Bob and Amanda needed to employ additional people to take over specific tasks because they no longer had the time or energy to handle them personally. To control the payment system, they employed full-time cashiers. To cope with customers' demands for alcoholic drinks, they hired a lawyer, got a liquor license, and employed full-time bartenders. To obtain restaurant supplies and manage restaurant services such as cleaning and equipment maintenance, they employed a restaurant manager. The manager was also responsible for overseeing the restaurant on days when the owners took a well-deserved break. By the end of its first year of operation, the B.A.R. and Grille had 50 full- and part-time employees, and the owners were seeking new avenues for expansion (Figure 4.1D).

Eager to use their newly acquired skills to create yet more value, the Richardses began to search for ideas for a new restaurant. Within 18 months they opened a waffle and pancake restaurant, and a year later they opened a wood-fired pizza/pasta bistro. With this growth, Bob and Amanda left their jobs in the B.A.R. and Grille. They hired shift managers to manage each restaurant, and they spent their time managing central support functions such as purchasing, marketing, and accounting, training new chefs, and developing menu and marketing plans (Figure 4.1E). To ensure that service and quality were uniformly excellent at all three restaurants, they developed written rules and procedures that told chefs, servers, and other employees what was expected of them—for example, how to prepare and present food and how to behave with customers. After five years of operation, they employed more than 150 full- or part-time people in their three restaurants, and their sales volume was over $5 million a year and a few years later, it was over $8 million.

Organizational Roles

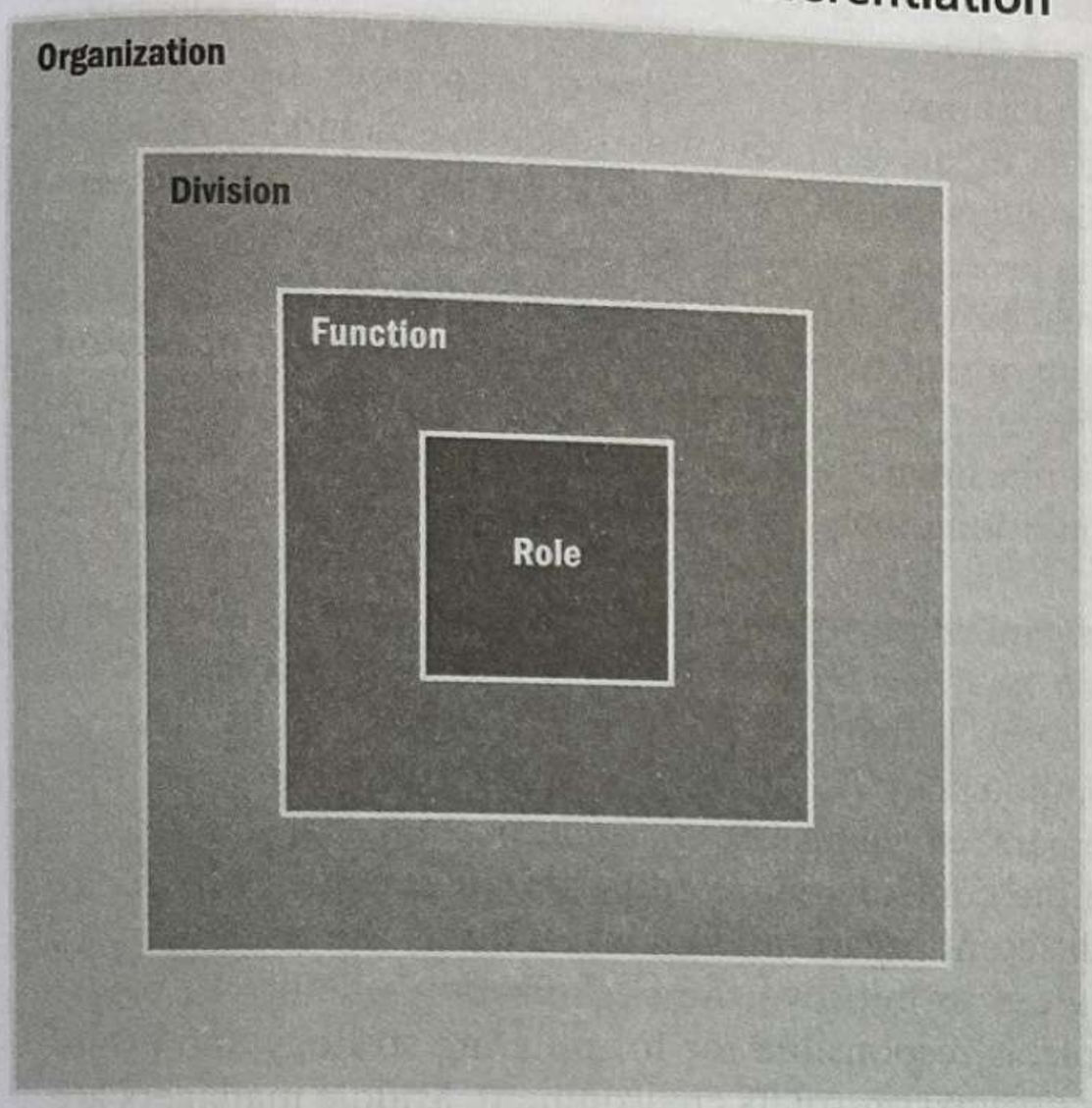
Organizational role
The set of task-related behaviors required of a person by his or her position in an organization.

The basic building blocks of differentiation are organizational roles (see Figure 4.2). An **organizational role** is a set of task-related behaviors required of a person by his or her position in an organization.[2] For example, the organizational role of a B.A.R. and Grille server is to provide customers with quick, courteous service to enhance their dining experience. A chef's role is to provide customers with high-quality, appetizing, cooked-to-order meals. A person who is given a role with identifiable tasks and responsibilities can be held accountable for the resources used to accomplish the duties of that position. Bob and Amanda held the server responsible for satisfying the dining needs of customers, the restaurant's crucial stakeholder group. The chef was accountable for providing high-quality meals to customers consistently and speedily.

As the division of labor increases in an organization, managers specialize in some roles and hire people to specialize in others. Specialization allows people to develop their individual abilities and knowledge, which are the ultimate source of an organization's core competences. At the B.A.R. and Grille, for example, the owners identified various tasks to be done, such as cooking, bookkeeping, and purchasing, and they hired people with the appropriate abilities and knowledge to do them.

Organizational structure is based on a system of interlocking roles, and the relationship of one role to another is defined by task-related behaviors. Some roles require people

Figure 4.2 **Building Blocks of Differentiation**



to oversee the behavior of others: Shift managers at the B.A.R. and Grille oversee the servers and bussers. A person who can hold another person accountable for his or her performance possesses authority over the other person. **Authority** is the power to hold people accountable for their actions and to make decisions about how to invest and use organizational resources.[3] The differentiation of an organization into individual organizational roles results in clear authority and responsibility requirements for each role in the system. When an individual clearly understands the responsibilities of his or her role and what a superior can require of a person in that role, the result within the organization is **control**—the ability to coordinate and motivate people to work in the organization's interests.

Authority
The power to hold people accountable for their actions and to make decisions concerning the use of organizational resources.

Control
The ability to coordinate and motivate people to work in the organization's interests.

Subunits: Functions and Divisions

In most organizations, people with similar and related roles are grouped into a subunit. The main subunits that develop in organizations are functions (or departments) and divisions. A **function** is a subunit composed of a group of people, working together, who possess similar skills or use the same kind of knowledge, tools, or techniques to perform their jobs. For example, in the B.A.R. and Grille, chefs are grouped together as the kitchen function, and servers grouped together as the dining room function. A **division** is a subunit that consists of a collection of functions or departments that share responsibility for producing a particular good or service. Take another look at Figure 4.1E. Each restaurant is a division composed of just two functions—dining room and kitchen—which are responsible for the restaurant's activities. Large companies like GE and Procter & Gamble have dozens of separate divisions, each one responsible for producing a particular product. In addition, these companies face the problem of how to organize these divisions' activities on a global level so they can create the most value, an issue discussed in detail in Chapter 8.

Function
A subunit composed of a group of people, working together, who possess similar skills or use the same kind of knowledge, tools, or techniques to perform their jobs.

Division
A subunit that consists of a collection of functions or departments that share responsibility for producing a particular good or service.

The number of different functions and divisions that an organization possesses is a measure of the organization's complexity—its degree of differentiation. Differentiation into functions and divisions increases an organization's control over its activities and allows the organization to accomplish its tasks more effectively.

As organizations grow in size, they differentiate into five different kinds of functions.[4] **Support functions** facilitate an organization's control of its relations with its environment and its stakeholders. Support functions include *purchasing*, to handle the acquisition of inputs; *sales and marketing*, to handle the disposal of outputs; and *public relations and legal affairs*, to respond to the needs of outside stakeholders. Bob and Amanda

Support functions
Functions that facilitate an organization's control of its relations with its environment and its stakeholders.

Production functions
Functions that manage and improve the efficiency of an organization's conversion processes so more value is created.

Maintenance functions
Functions that enable an organization to keep its departments in operation.

Adaptive functions
Functions that allow an organization to adjust to changes in the environment.

Managerial functions
Functions that facilitate the control and coordination of activities within and among departments.

Richards hired a manager to oversee purchasing for all three restaurants and an accountant to manage the books (see Figure 4.1E).

Production functions manage and improve the efficiency of an organization's conversion processes so that more value is created. Production functions include *production operations*, *production control*, and *quality control*. At Ford, the production operations department controls the manufacturing process, production control decides on the most efficient way to produce cars at the lowest cost, and quality control monitors product quality.

Maintenance functions enable an organization to keep its departments in operation. Maintenance functions include *personnel*, to recruit and train employees and improve skills; *engineering*, to repair broken machinery; and *janitorial services*, to keep the work environment safe and healthy—conditions that are very important to a restaurant like the B.A.R. and Grille.

Adaptive functions allow an organization to adjust to changes in the environment. Adaptive functions include *research and development*, *market research*, and *long-range planning*, which allow an organization to learn from and attempt to manage its environment and thus increase its core competences. At the B.A.R. and Grille, developing new menu choices to keep up with customers' changing tastes is an important adaptive activity.

Managerial functions facilitate the control and coordination of activities within and among departments. Managers at different organizational levels direct the *acquisition of, investment in, and control of resources* to improve the organization's ability to create value. Top management, for example, is responsible for formulating strategy and establishing the policies the organization uses to control its environment. Middle managers are responsible for managing the organization's resources to meet its goals. Lower-level managers oversee and direct the activities of the workforce.

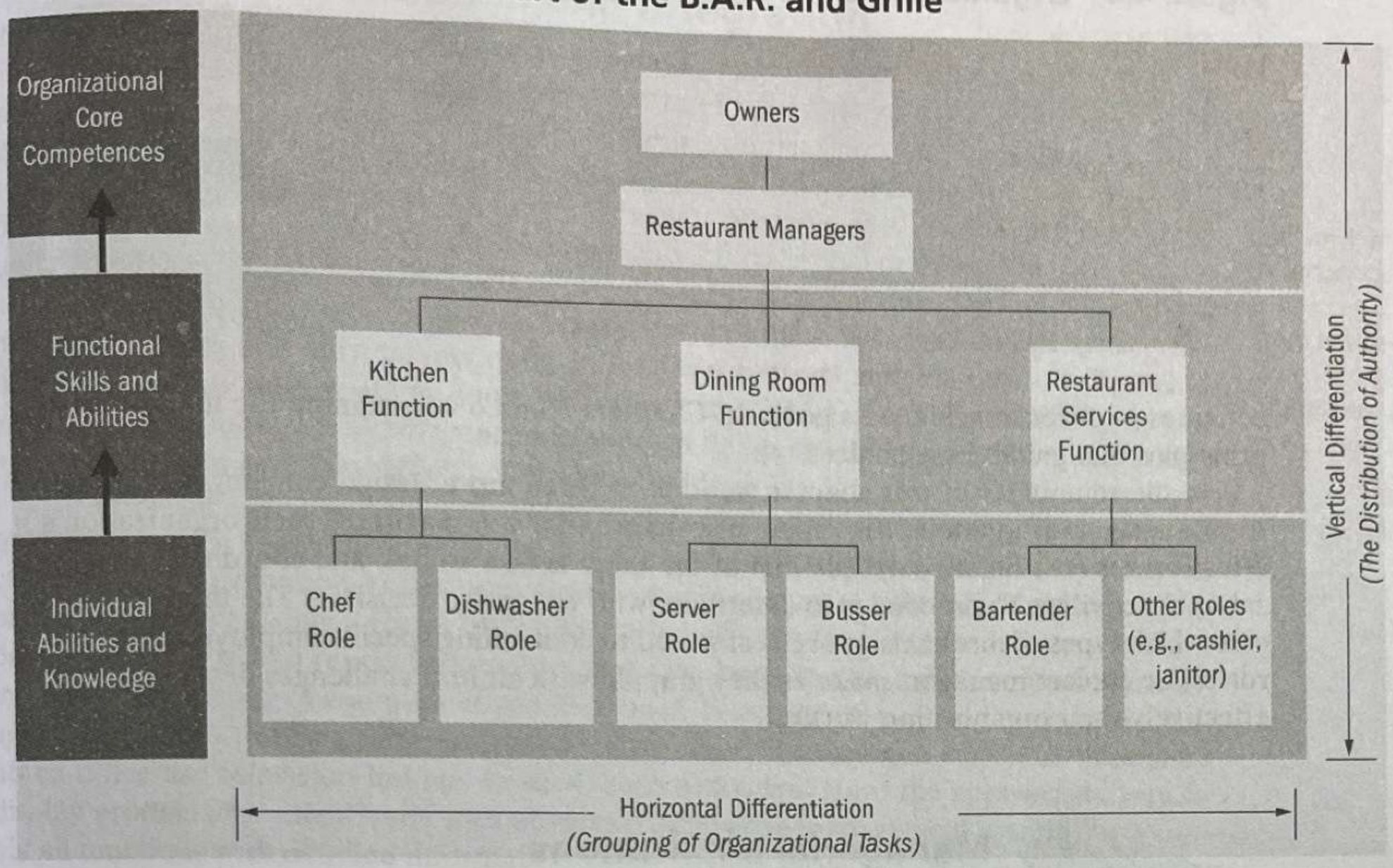
Differentiation at the B.A.R. and Grille

In the B.A.R. and Grille, differentiation at first was minimal. The owners, with the help of one other person, did all the work. But with unexpected success came the need to differentiate activities into separate organizational roles and functions, with Bob managing the kitchen and Amanda the dining room. As the restaurant continued to grow, Bob and Amanda were confronted with the need to develop skills and capabilities in the five functional areas. For the support role, they hired a restaurant services manager to take charge of purchasing supplies and local advertising. To handle the production role, they increased the division of labor in the kitchen and dining room. They hired cleaning staff, cashiers, and an external accountant for maintenance tasks. They themselves handled the adaptive role of ensuring that the organization served customer needs. Finally, Bob and Amanda took on the managerial role of establishing the pattern of task and functional relationships that most effectively accomplished the restaurant's overall task of serving customers good food. Collectively, the five functions constituted the B.A.R. and Grille and gave it the ability to create value.

As soon as the owners decided to open new kinds of restaurants and expand the size of their organization, they faced the challenge of differentiating into divisions, to control the operation of three restaurants simultaneously. The organization grew to three divisions, each of which made use of support functions centralized at the top of the organization (see Figure 4.1E). In large organizations each division is likely to have its own set of the five basic functions and is thus a *self-contained division*.

As Chapter 1 discusses, functional skills and abilities are the source of an organization's *core competences*, the set of unique skills and capabilities that give it a competitive advantage.[5] An organization's competitive advantage may lie in any or all of an organization's functions. An organization could have superior low-cost production, exceptional managerial talent, or a leading R&D department.[6] A core competence of the B.A.R. and Grille was the way Bob and Amanda took control of the differentiation of their restaurant and increased its ability to attract customers who appreciated the good food and good service they received. In short, they created a core competence that gave their restaurant a competitive advantage over other restaurants. In turn, this competitive advantage gave them access to resources that allowed them to expand by opening new restaurants.

Figure 4.3 Organizational Chart of the B.A.R. and Grille



Vertical and Horizontal Differentiation

Figure 4.3 shows the organizational chart that emerged in the B.A.R. and Grille as differentiation unfolded. An organizational chart is a drawing that shows the end result of organizational differentiation. Each box on the chart represents a role or function in the organization. Each role has a vertical and a horizontal dimension.

The organizational chart *vertically* differentiates organizational roles in terms of the amount of authority that goes with each role. A classification of people according to their relative authority and rank is called a **hierarchy.** Roles at the top of an organization's hierarchy possess more authority and responsibility than do roles farther down in the hierarchy; each lower role is under the control or supervision of a higher one. Managers designing an organization have to make decisions about how much vertical differentiation to have in the organization—that is, how many levels should there be from top to bottom. To maintain control over the various functions in the restaurant, for example, Bob and Amanda realized that they needed to create the role of restaurant manager. Because the restaurant manager would report to them and would supervise lower-level employees, this new role added a level to the hierarchy. **Vertical differentiation** refers to the way an organization designs its hierarchy of authority and creates reporting relationships to link organizational roles and subunits.[7] Vertical differentiation establishes the distribution of authority between levels to give the organization more control over its activities and increase its ability to create value.

Hierarchy
A classification of people according to authority and rank.

Vertical differentiation
The way an organization designs its hierarchy of authority and creates reporting relationships to link organizational roles and subunits.

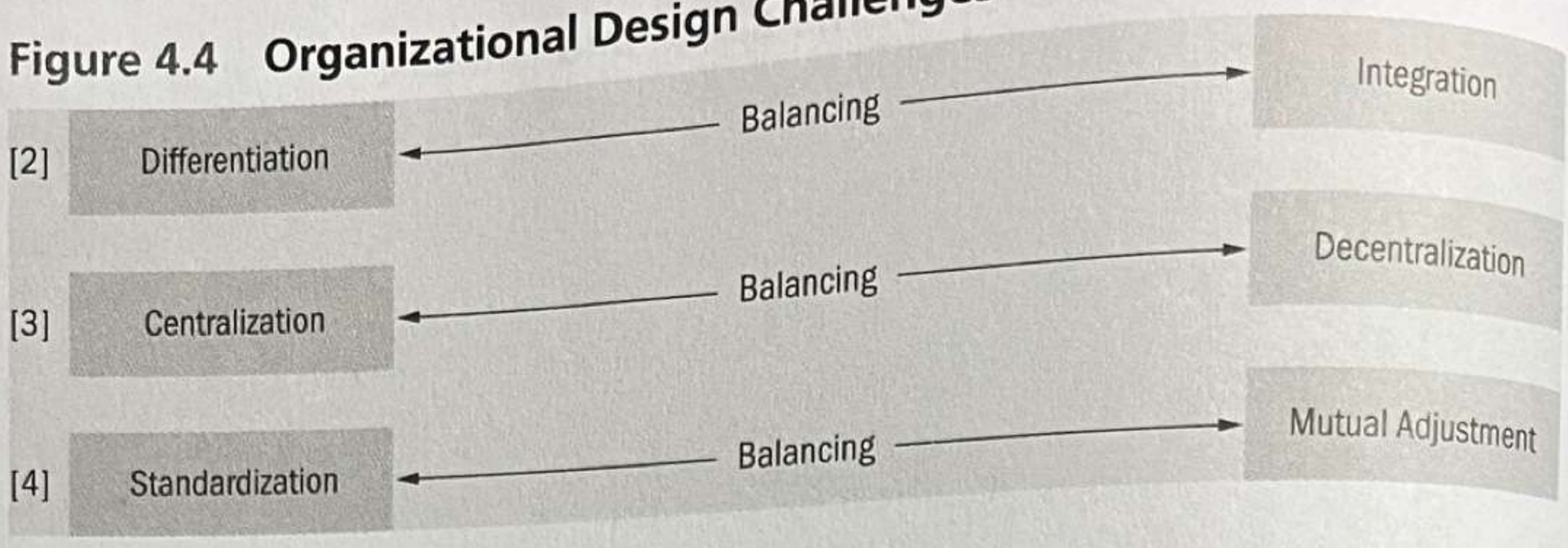
The organizational chart *horizontally* differentiates roles according to their main task responsibilities. For example, when Bob and Amanda realized that a more complex division of tasks would increase restaurant effectiveness, they created new organizational roles—such as restaurant manager, cashier, bartender, and busser—and grouped these roles into functions. **Horizontal differentiation** refers to the way an organization groups organizational tasks into roles and roles into subunits (functions and divisions).[8] Horizontal differentiation establishes the division of labor that enables people in an organization to become more specialized and productive and increases its ability to create value.

Horizontal differentiation
The way an organization groups organizational tasks into roles and roles into subunits (functions and divisions).

Organizational Design Challenges

We have seen that the principal design challenge facing an organization is to choose the levels of vertical and horizontal differentiation that allow the organization to control its

Figure 4.4 Organizational Design Challenges



activities in order to achieve its goals. In Chapters 5 and 6 we examine the major design principles that guide these choices.

In the remainder of this chapter we look at three more design challenges that confront managers who attempt to create a structure that will maximize their organization's effectiveness (see Figure 4.4). The first of the three is how to link and coordinate organizational activities. The second is to determine who will make decisions. The third is to decide which types of mechanisms are best suited to controlling specific employee tasks and roles. The choices managers make as they grapple with all four challenges determine how effectively their organization works.

Managerial Implications

Differentiation

1. No matter what your position in an organization, draw an organizational chart so you can identify the distribution of authority and the division of labor.
2. No matter how few or how many people you work with or supervise, analyze each person's role and the relationships among roles to make sure the division of labor is best for the task being performed. If it is not, redefine role relationships and responsibilities.
3. If you supervise more than one function or department, analyze relationships among departments to make sure the division of labor best suits the organization's mission: the creation of value for stakeholders.

IT solutions such as enterprise management systems and mobile computing applications are helping organizations promote cooperation and communication among their subunits in real time.

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Balancing Differentiation and Integration

Horizontal differentiation is supposed to enable people to specialize and thus become more productive. However, companies have often found that specialization limits communication between subunits and prevents them from learning from one another. As a result of horizontal differentiation, the members of different functions or divisions develop a **subunit orientation**—a tendency to view one's role in the organization strictly from the perspective of the time frame, goals, and interpersonal orientations of one's subunit.[9] For example, the production department is most concerned with reducing costs and increasing quality; thus it tends to have a short-term outlook because cost and quality are production goals that must be met daily. In R&D, in contrast, innovations to the production process may take years to come to fruition; thus R&D employees usually have a longer term outlook. When different functions see things differently, communication fails and coordination becomes difficult, if not impossible.

Subunit orientation
A tendency to view one's role in the organization strictly from the perspective of the time frame, goals, and interpersonal orientations of one's subunit.

To avoid the communication problems that can arise from horizontal differentiation, organizations try to find new or better ways to integrate functions—that is, to promote cooperation, coordination, and communication among separate subunits. Most large companies today use advanced forms of IT that allow different functions or divisions to share databases, memos, and reports, often on a real-time basis. Increasingly, companies are using electronic means of communication like email, teleconferencing, and enterprise management systems to bring different functions together. For example, buyers at Walmart's home office use television linkups to show each individual store the appropriate way to display products for sale. Nestlé uses advanced enterprise management systems that supply all functions with detailed information about the ongoing activities of other functions.

Integration and Integrating Mechanisms

How to facilitate communication and coordination among subunits is a major challenge for managers. One reason for problems on this front is the development of subunit orientations that makes communication difficult and complex. Another reason for lack of coordination and communication is that managers often fail to use the appropriate mechanisms and techniques to integrate organizational subunits. **Integration** is the process of coordinating various tasks, functions, and divisions so they work together, not at cross purposes. Table 4.1 lists seven integrating mechanisms or techniques that managers can use as their organization's level of differentiation increases.[10] The simplest mechanism is a hierarchy of authority; the most complex is a department created specifically to coordinate the activities of diverse functions or divisions. The table includes examples of how a company like Johnson & Johnson might use all seven types of integration mechanisms as it goes about managing one major product line—disposable diapers. We examine each mechanism separately.

Integration
The process of coordinating various tasks, functions, and divisions so that they work together and not at cross purposes.

HIERARCHY OF AUTHORITY The simplest integrating technique is the organization's hierarchy of authority, which differentiates people by the amount of authority they possess. Because the hierarchy dictates who reports to whom, it coordinates various organizational roles. Managers must carefully divide and allocate authority within a function and between one function and others to promote coordination. For example, at Becton Dickinson, a high-tech medical instrument maker, the marketing and engineering departments were frequently squabbling over product specifications. Marketing argued that the company's products needed more features to please customers. Engineering wanted to simplify product design to reduce costs.[11] The two departments could not resolve their differences because the head of marketing reported to the head of engineering. To resolve this conflict, Becton Dickinson reorganized its hierarchy so that both marketing and engineering reported to the head of the Instrument Product Division.

Design Challenge 2

We can't get people to communicate and coordinate in this organization. Specifying tasks and roles is supposed to help coordinate the work process, but here it builds barriers between people and functions.

TABLE 4.1 Types and Examples of Integrating Mechanisms

Integration Mechanism (In Order of Increasing Complexity)	Description	Example (e.g., in Johnson & Johnson)
Hierarchy of authority	A ranking of employees integrates by specifying who reports to whom.	Salesperson reports to Diaper Division sales manager.
Direct contact	Managers meet face to face to coordinate activities.	Diaper Division sales and manufacturing managers meet to discuss scheduling.
Liaison role	A specific manager is given responsibility for coordinating with managers from other subunits on behalf of his or her subunit.	A person from each of J&J's production, marketing, and research and development departments is given responsibility for coordinating with the other departments.
Task force	Managers meet in temporary committees to coordinate cross-functional activities.	A committee is formed to find new ways to recycle diapers.
Team	Managers meet regularly in permanent committees to coordinate activities.	A permanent J&J committee is established to promote new-product development in the Diaper Division.
Integrating role	A new role is established to coordinate the activities of two or more functions or divisions.	One manager takes responsibility for coordinating Diaper and Baby Soap divisions to enhance their marketing activities.
Integrating department	A new department is created to coordinate the activities of functions or divisions.	A team of managers is created to take responsibility for coordinating J&J's centralization program to allow divisions to share skills and resources.

The head of the division was an impartial third party who had the authority to listen to both managers' cases and make the decision that was best for the organization as a whole.

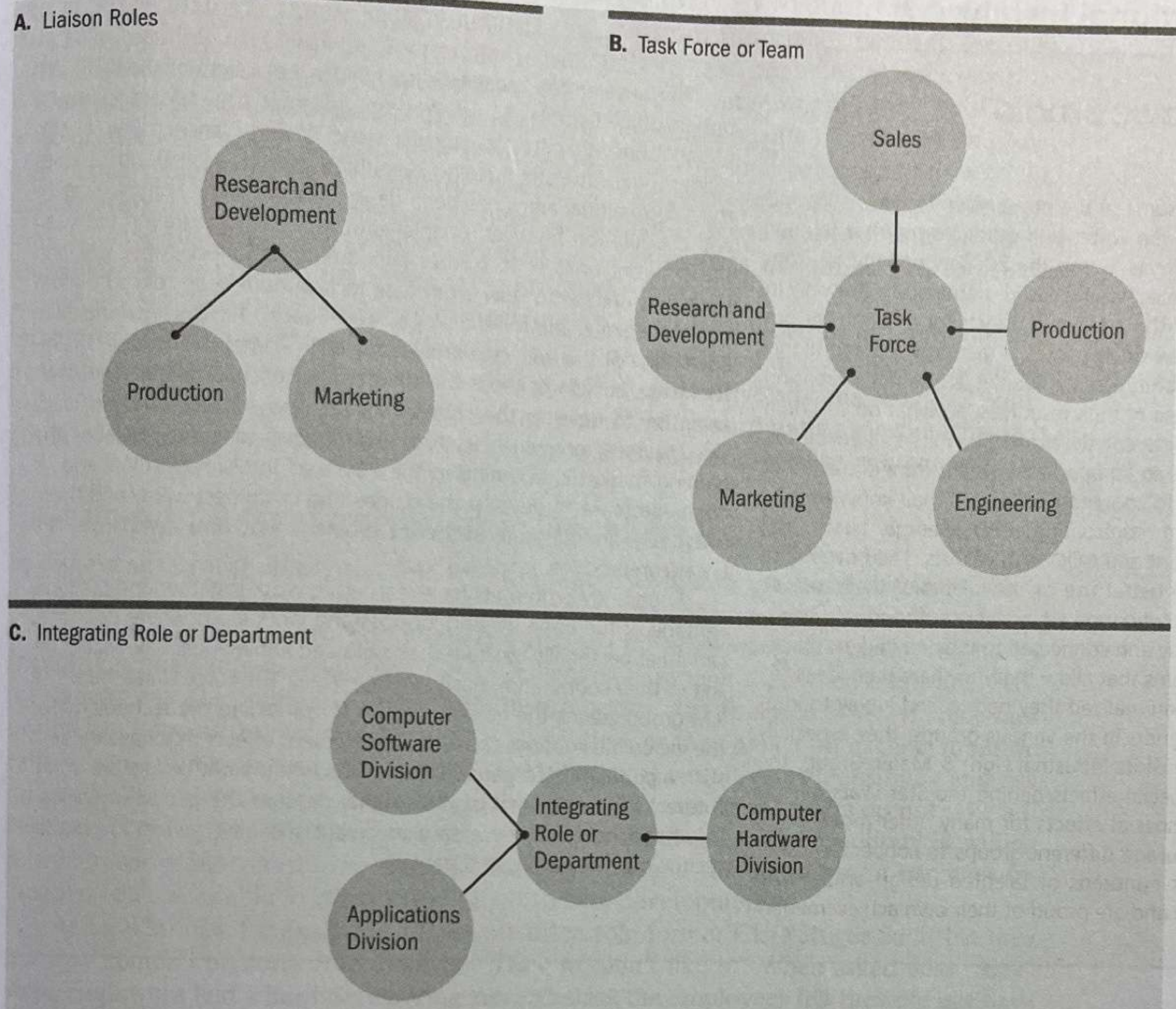
DIRECT CONTACT Direct contact between people in different subunits is a second integrating mechanism; there are often more problems associated with using it effectively than with the hierarchy of authority. The principal problem with integration across functions is that a manager in one function has *no authority* over a manager in another. Only the CEO or some other top manager above the functional level has power to intervene if two functions come into conflict. Consequently, establishing personal relationships and professional contacts between people at all levels in different functions is a crucial step to overcome the problems that arise because subunit orientations differ. Managers from different functions who have the ability to make direct contact with one another can then work together to solve common problems—and prevent them from arising in the first place. If disputes still occur, however, it is important for both parties to be able to appeal to a common superior who is not far removed from the scene of the problem.

LIAISON ROLES As the need for communication between two subunits becomes increasingly important, often because of a rapidly changing environment, one or a few members from each subunit are often given the primary responsibility to work together to coordinate subunit activities. The people who hold these connecting, or liaison, roles are able to develop in-depth relations with people in other subunits. This interaction helps overcome barriers between subunits. Over time, as the people in liaison roles learn to cooperate, they can become increasingly flexible in accommodating other subunits' requests. Figure 4.5A illustrates a liaison role.

TASK FORCES As an organization increases in size and complexity, more than two subunits may need to work together to solve common problems. Increasing an organization's ability to serve its customers effectively, for example, may require input from production, marketing, engineering, and R&D. The solution commonly takes the form of a **task force,** a temporary committee set up to handle a specific problem (Figure 4.5B). One or a few members of each function join a task force that meets regularly until a solution to the problem is found. Task force members are then responsible for taking the solution back to their functions to gain

Task force
A temporary committee set up to handle a specific problem.

Figure 4.5 Integrating Mechanisms



• Indicates managers with responsibility for integration between subunits.

their input and approval. To increase the effectiveness of task forces, a senior manager who is not a member of any of the functions involved usually chairs the meetings.

TEAMS When the issue a task force is dealing with becomes an ongoing strategic or administrative issue, the task force becomes permanent. A *team* is a permanent task force or committee. Most companies today, for example, have formed product development and customer-contact teams to monitor and respond to the ongoing challenges of increased competition in a global market. As discussed in Organizational Insight 4.2, LucasArts, one of the most successful movie studios, moved to a team-based organization to make the most of the talents of its creative designers.

Managers spend about 70% of their time in committee meetings.[14] Teams provide the opportunity for the face-to-face contact and continual adjustment that managers need to deal effectively with ongoing complex issues. As they set up a team structure, managers face the ongoing challenge of creating a committee system that gives them effective control over organizational activities. Sometimes teams become ineffective over time because the problems facing the organization change but team membership and structure remains unchanged. People often fight to stay on a committee, or protect their team, because team membership gives a person power in the organization. But this power does not necessarily promote organizational goals. At Whirlpool, the appliance maker, its then CEO David Whitwam pioneered the establishment of hundreds of mini-management teams throughout the company to bring about change, improve quality control, and streamline production. Whitwam's goal? To use teams to change patterns of authority and decision making to increase interaction and promote creativity among managers.[15]

Organizational Insight 4.2

Integrating a Movie Studio

The Star Wars movies are some of the best known in the world, and George Lucas, the director who writes and produces them, is famous for his pioneering special effects. But in the 2000s, competition from other special effects companies has increased dramatically, not only in the development of state-of-the-art special effects for new movies but also in the production of new video games, a fast-growing and highly profitable market. All special effects companies are under increasing pressure to make the best use of their resources. So what do you do if your company has many different development units staffed by talented engineers but that are so far apart and distant from one another that they have no incentive to cooperate and share their knowledge?

This was the problem confronting CEO George Lucas and Micheline Chau, the president and COO of LucasArts. Their overriding problem was how to make better use of the talents of their creative digital artists and engineers who worked in a very autonomous way—often working independently and connected to their coworkers mainly by video conferencing systems that allow them to share their ideas.[12]

By 2008 Lucas and Chau realized they had to find a way to integrate the activities of designers in the various groups; they especially needed to make more use of its Industrial Light & Magic Group, the unit responsible for the special effects behind the Star Wars movies and that also creates the special effects for many other movie companies. How do you encourage different groups to cooperate, especially when each contains hundreds of talented design artists who value their own autonomy and are proud of their own achievements?

The answer for Lucas was to build a new state-of-the-art $250 million office complex in the Presidio, a former army base and now a national park that has spectacular views of San Francisco Bay. In this modernistic, futuristic building everything from its rooms and facilities to its recreational areas has been designed to facilitate communication and cooperation between people—but especially integration between the different units.[13] To further integration, designers in the ILM and LucasArts units who now work face to face have been told to build a common digital platform that will allow each unit to learn and take advantage of the skills and knowledge of the other. To increase its performance, LucasArts needs these experts to collaborate and share their expertise to develop the state-of-the-art new movies, and especially video games, on which its future profitability depends. Indeed, the gaming market is booming in the 2000s as the Nintendo Wii and its competitors vie to develop the games that customers want, and these often rely on the state-of-the-art graphics that only companies like Lucas can produce.

Apparently both units have learned to work together and take advantage of the open inviting lounges and work areas where designers can meet personally to share their skills and knowledge. One recent result of their cooperation has been Star Wars: The Force Unleashed. The ILM group credits the gaming groups for providing the technology for the incredible lighting, facial, and movement effects that have made it such a popular video game. Who knows what might be in store in the future as the members of these units develop the personal relationships and networks necessary to create the next generation digital technology for movies and gaming.

Integrating role
A full-time position established specifically to improve communication between divisions.

INTEGRATING ROLES OR DEPARTMENTS As organizations become large and complex, communication barriers between functions and divisions are likely to increase. Managers in divisions making different products, for example, may never meet one another. Coordinating subunits is especially difficult in organizations that employ many thousands of people. One way to overcome these barriers is to create integrating roles that coordinate subunits. An **integrating role** is a *full-time* managerial position established specifically to improve communication between divisions. (A liaison role, by contrast, is just one of the tasks involved in a person's full-time job.) Figure 4.5C shows an integrating role that might exist in a large computer company like Dell or Apple.

The purpose of an integrating role is to promote the sharing of information and knowledge to better pursue organizational goals such as product innovation, increased flexibility, and improved customer service. People in integrating roles are often senior managers who have decided to give up authority in a specific function and focus on company-wide integration. They often chair important task forces and teams and report back directly to top management.

When a company has many employees in integrating roles, it creates an integrating department that coordinates the activities of all subunits. Du Pont, the chemical maker, has a department that employs over 200 people in integrating roles; so do Microsoft and IBM. In general, the more complex and highly differentiated an organization, the more complex are the integration mechanisms it needs to overcome communication and coordination barriers between functions and divisions.

Differentiation versus Integration

The design issue facing managers is to establish a level of integration that matches the organization's level of differentiation. Managers must achieve an appropriate *balance* between

differentiation and integration. A complex organization that is highly differentiated needs a high level of integration to coordinate its activities effectively. By contrast, when an organization has a relatively simple, clearly defined role structure, it normally needs to use only simple integrating mechanisms. Its managers may find that the hierarchy of authority provides all the control and coordination they need to achieve organizational goals.

At all costs, managers need to be sure they do not differentiate or integrate their organization too much. Differentiation and integration are both expensive in terms of the number of managers employed and the amount of managerial time spent on coordinating organizational activities. For example, every hour that employees spend on committees that are not really needed costs the organization thousands of dollars because these employees are not being put to their most productive use.

Managers facing the challenge of deciding how and how much to differentiate and integrate must do two things: (1) carefully guide the process of differentiation so an organization builds the core competences that give it a competitive advantage; and (2) carefully integrate the organization by choosing appropriate coordinating mechanisms that allow subunits to cooperate and work together to strengthen its core competences.[16]

Balancing Centralization and Decentralization

In discussing vertical differentiation, we note that establishing a hierarchy of authority is supposed to improve the way an organization functions because people can be held accountable for their actions: The hierarchy defines the area of each person's authority within the organization. Many companies, however, complain that when a hierarchy exists, employees are constantly looking to their superiors for direction.[17] When some new or unusual issue arises, they prefer not to deal with it, or they pass it on to their superior, rather than assume responsibility and the risk of dealing with it. As responsibility and risk taking decline so does organizational performance, because its members do not take advantage of new opportunities for using its core competences. When nobody is willing to take responsibility, decision making becomes slow and the organization becomes inflexible—that is, unable to change and adapt to new developments.

At Levi Strauss, for example, employees often told former CEO Roger Sant that they felt they couldn't do something because "*They* wouldn't like it." When asked who "they" were, employees had a hard time saying; nevertheless, the employees felt they did not have the authority or responsibility to initiate changes. Sant started a "Theybusters" campaign to renegotiate authority and responsibility relationships so employees could take on new responsibilities.[18] The solution involved decentralizing authority; that is, employees at lower levels in the hierarchy were given the authority to decide how to handle problems and issues that arose while they performed their jobs. The issues of how much to centralize or decentralize the authority to make decisions offers a basic design challenge for all organizations.

Centralization versus Decentralization of Authority

Authority gives one person the power to hold other people accountable for their actions and the right to make decisions about the use of organizational resources. As we saw in the B.A.R. and Grille example, vertical differentiation involves choices about how to distribute authority. But even when a hierarchy of authority exists, the problem of how much decision-making authority to delegate to each level must be solved.

It is possible to design an organization in which managers at the top of the hierarchy have all power to make important decisions. Subordinates take orders from the top, are accountable for how well they obey those orders, and have no authority to initiate new actions or use resources for purposes that they believe are important. When the authority

Design Challenge 3

People in this organization don't take responsibility or risks. They are always looking to the boss for direction and supervision. As a result, decision making is slow and cumbersome, and we miss out on a lot of opportunities to create value.

Centralized
Organizational setup in which the authority to make important decisions is retained by managers at the top of the hierarchy.

Decentralized
An organizational setup in which the authority to make important decisions about organizational resources and to initiate new projects is delegated to managers at all levels in the hierarchy.

to make important decisions is retained by managers at the top of the hierarchy, authority is said to be highly **centralized.**[19] By contrast, when the authority to make important decisions about organizational resources and to initiate new projects is delegated to managers at all levels in the hierarchy, authority is highly **decentralized.**

Each alternative has certain advantages and disadvantages. The advantage of centralization is that it lets top managers coordinate organizational activities and keep the organization focused on its goals. Centralization becomes a problem, however, when top managers become overloaded and immersed in operational decision making about day-to-day resource issues (such as hiring people and obtaining inputs). When this happens they have little time to spend on long-term strategic decision making, and planning crucial future organizational activities, such as deciding on the best strategy to compete globally, is neglected.

Organizational Insight 4.3

To Decentralize or Centralize Are Important Choices at Union Pacific and Yahoo!

Union Pacific (UP), one of the biggest railroad freight carriers in the United States, faced a crisis when an economic boom in the early 2000s led to a record increase in the amount of freight the railroad had to transport—but at the same time the railroad was experiencing record delays in moving this freight. UP's customers complained bitterly about the problem, and the delays cost the company tens of millions of dollars in penalty payments. Why the problem? UP's top managers decided to centralize authority high in the organization and to standardize operations to cut operating costs. All scheduling and route planning were handled centrally at headquarters to increase efficiency. The job of regional managers was largely to ensure the smooth flow of freight through their regions.

Recognizing that efficiency had to be balanced by the need to be responsive to customers, UP announced a sweeping reorganization. Regional managers would have the authority to make everyday operational decisions; they could alter scheduling and routing to accommodate customer requests even if it raised costs. UP's goal was to "return to excellent performance by simplifying our processes and becoming easier to deal with." In deciding to decentralize authority, UP was following the lead of its competitors that had already decentralized their operations. Its managers would continue to "decentralize decision making into the field, while fostering improved customer responsiveness, operational excellence, and personal accountability." The result has been continued success for the company; in fact, in 2011 several large companies recognized Union Pacific as the top railroad in on-time service performance and customer service.[20]

Yahoo! has been forced by circumstances to pursue a different approach to decentralization. In 2009, after Microsoft failed to take over Yahoo! because of the resistance of Jerry Wang, a company founder, the company's stock price plunged. Wang, who had come under intense criticism for preventing the merger, resigned as CEO and was replaced by Carol Bartz, who had a long history of success in managing online companies. Bartz moved quickly to find ways to reduce Yahoo!'s cost structure and simplify its operations to maintain its strong online brand identity. Intense competition from the growing popularity of online companies such as Google, Facebook, and Twitter also threatened its popularity.

Bartz decided the best way to restructure Yahoo! was to recentralize authority. To gain more control over its different business units and reduce operating costs, she decided to centralize functions that had

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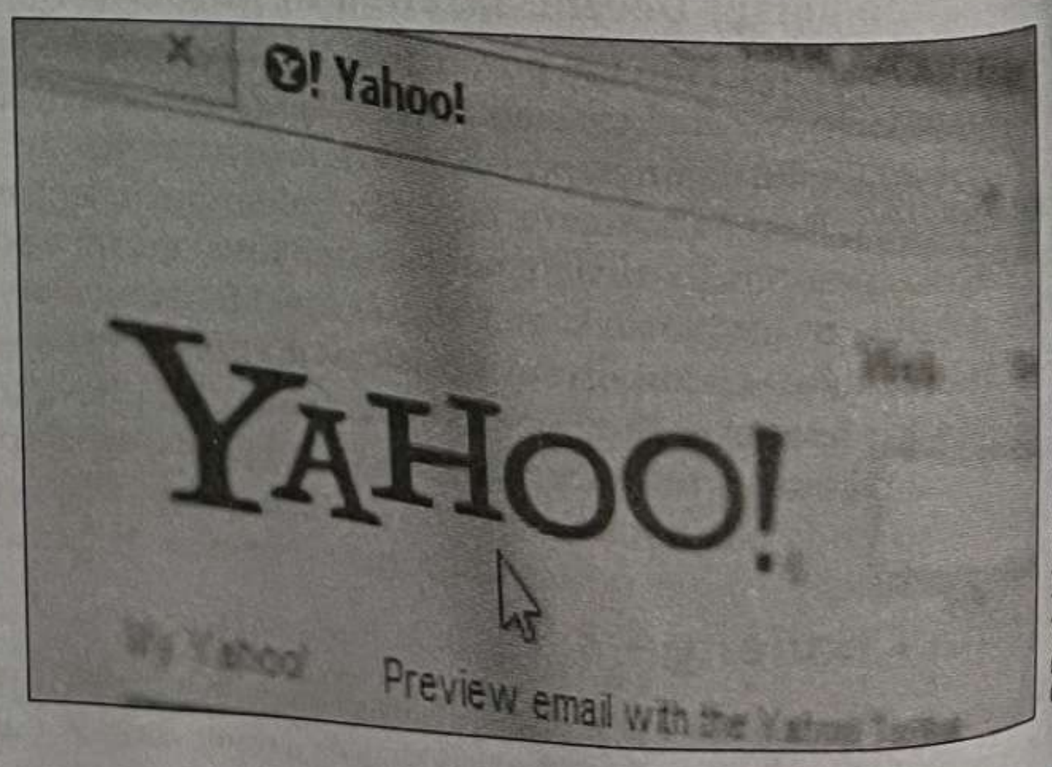

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previously been performed by Yahoo!'s different business units, such as product development and marketing activities.[21] For example, all the company's publishing and advertising functions were centralized and put under the control of a single executive. Yahoo!'s European, Asian, and emerging markets divisions were centralized, and another top executive took control. Bartz's goal was to find out how she could make the company's resources perform better. While she was centralizing authority she was also holding many "town hall" meetings asking Yahoo! employees from all functions, "What would you do if you were me?" Even as she centralized authority to help Yahoo! recover its dominant industry position, she was looking for the input of employees at every level in the hierarchy.

Nevertheless, in 2011 Yahoo! was still in a precarious position. It had signed a search agreement with Microsoft to use the latter's search technology, Bing; Bartz had focused on selling off Yahoo!'s noncore business assets to reduce costs and gain the money for strategic acquisitions. But the company was still in an intense battle with other dot-coms that had more resources, such as Google and Facebook, and in 2011 Bartz made it clear the company was still for sale—at the right price.[22]

The advantage of decentralization is that it promotes flexibility and responsiveness by allowing lower-level managers to make on-the-spot decisions. Managers remain accountable for their actions but have the opportunity to assume greater responsibilities and take potentially successful risks. Also, when authority is decentralized managers can make important decisions that allow them to demonstrate their personal skills and competences and may be more motivated to perform well for the organization. The downside of decentralization is that if so much authority is delegated that managers at all levels can make their own decisions, planning and coordination become very difficult. Thus too much decentralization may lead an organization to lose control of its decision-making process! Organizational Insight 4.3 reveals many of the issues surrounding this design choice.

As these examples suggest, the design challenge for managers is to decide on the correct balance between centralization and decentralization of decision making in an organization. If authority is too decentralized, managers have so much freedom that they can pursue their own functional goals and objectives at the expense of organizational goals. In contrast, if authority is too centralized and top management makes all important decisions, managers lower down in the hierarchy become afraid to make new moves and lack the freedom to respond to problems as they arise in their own groups and departments.

The ideal situation is a balance between centralization and decentralization of authority so that middle and lower managers who are at the scene of the action are allowed to make important decisions, and top managers' primary responsibility becomes managing long-term strategic decision making. The result is a good balance between long-term strategy making and short-term flexibility and innovation as lower-level managers respond quickly to problems and changes in the environment as they occur.

Why were the Levi Strauss managers so reluctant to take on new responsibilities and assume extra authority? A previous management team had centralized authority so that it could retain day-to-day control over important decision making. The company's performance suffered, however, because in spending all their time on day-to-day operations, top managers lost sight of changing customer needs and evolving trends in the clothing industry. The new top management team that took over recognized the need to delegate authority for operational decision making to lower-level managers so that they could concentrate on long-term strategic decision making. Consequently, top management decentralized authority until they believed they had achieved the correct balance.

As noted earlier, the way managers and employees behave in an organization is a direct result of managers' decisions about how the organization is to operate. Managers who want to discourage risk taking and to maximize control over subordinates' performance centralize authority. Managers who want to encourage risk taking and innovation decentralize authority. In the army, for example, the top brass generally wishes to discourage lower-level officers from acting on their own initiative, for if they did, the power of centralized command would be gone and the army would splinter. Consequently, the army has a highly centralized decision-making system that operates by strict rules and with a well-defined hierarchy of authority. By contrast, at Amgen and

Becton Dickson, a medical equipment maker, authority is decentralized and employees are provided with a broad framework within which they are free to make their own decisions and take risks, as long as these are consistent with the company's master plan. In general, high-tech companies decentralize authority because this encourages innovation and risk taking.

Decisions about how to distribute decision-making authority in an organization change as an organization changes—that is, as it grows and differentiates. How to balance authority is not a design decision that can be made once and forgotten; it must be made on an ongoing basis and is an essential part of the managerial task. We examine this issue in detail in Chapters 5 and 6.

Balancing Standardization and Mutual Adjustment

Written rules and standard operating procedures (SOPs) and unwritten values and norms are important forms of behavior control in organizations. They specify *how* employees are to perform their organizational roles, and they set forth the tasks and responsibilities associated with each role. Many companies, however, complain that employees tend to follow written and unwritten guidelines too rigidly instead of adapting them to the needs of a particular situation. Strictly following rules may stifle innovation; detailed rules specifying how decisions are to be made leave no room for creativity and imaginative responses to unusual circumstances. As a result, decision making becomes inflexible and organizational performance suffers.

Dell, for example, was well known as a company that strived to be close to its customers and responsive to their needs. But as Dell grew in the 2000s it developed a standardized response to customers' requests; it only offered customers a limited range of PCs and a limited number of options to keep its costs low. Standardizing operations to reduce costs had become more important than giving customers what they wanted, for example, more powerful laptops that came in a range of colors—something that was driving increasing sales at Apple and HP. In addition, its rapid growth led to internal communication problems among Dell's different functions; increasingly communication took place through formal rules and by committee, and this slowed product development and reduced Dell's ability to offer customers new PCs that had the design and features that could compete with Apple and HP. Dell has still not recovered from this problem. In 2011 its new lines of computers still were not attracting enough customers and it was losing market share to Apple, which seemed to be able to anticipate what customers wanted from new computing devices, such as tablet computers. Apple moves quickly to design new models because a focused team of employees was in charge of each of its different products lines, for example, iPhones and iPads, and were continually searching for ways to improve their performance.

Standardization
Conformity to specific models or examples—defined by sets of rules and norms—that are considered proper in a given situation.

Mutual adjustment
The compromise that emerges when decision making and coordination are evolutionary processes and people use their judgment rather than standardized rules to address a problem.

Formalization
The use of written rules and procedures to standardize operations.

Rules
Formal written statements that specify the appropriate means for reaching desired goals.

The challenge facing all organizations, large and small, is to design a structure that achieves the right balance between standardization and mutual adjustment. **Standardization** is conformity to specific models or examples—defined by well-established sets of rules and norms—that are considered proper in a given situation. Standardized decision-making and coordination through rules and procedures make people's actions routine and predictable.[23] **Mutual adjustment,** on the other hand, is the evolving process through which people use their current best judgment of events rather than standardized rules to address problems, guide decision making, and promote coordination. The right balance makes many actions predictable so that ongoing organizational tasks and goals are achieved, yet it gives employees the freedom to behave flexibly so they can respond to new and changing situations creatively.

Formalization: Written Rules

Formalization is the use of written rules and procedures to standardize operations.[24] **Rules** are formal written statements that specify the appropriate means for reaching desired goals. When people follow rules, they behave in accordance with certain specified principles. In an organization in which formalization and standardization are extensive—for example, the military, FedEx, or UPS—everything is done by the book. There is no

room for mutual adjustment; rules specify how people are to perform their roles and how decisions are to be made, and employees are accountable for following the rules. Moreover, employees have no authority to break the rules.

A high level of formalization typically implies centralization of authority. A low level of formalization implies that coordination is the product of mutual adjustment among people across organizational functions and that decision making is a dynamic process in which employees apply their skills and abilities to respond to change and solve problems. Mutual adjustment typically implies decentralization of authority because employees must have the authority to commit the organization to certain actions when they make decisions.

Socialization: Understood Norms

Norms are standards or styles of behavior that are considered typical or representative of a certain group of people and which also regulate and govern their behavior. Members of the group follow a norm because it is a generally agreed-upon standard for behavior. Many norms arise informally as people work together over time. In some organizations it is the norm that people take an hour and a quarter for lunch, despite a formally specified one-hour lunch break; in others it is the norm that no one leaves until 6:30 pm—or before the boss. Over time, norms influence and control the way people and groups view and respond to a particular event or situation.

Norms
Standards or styles of behavior that are considered acceptable or typical for a group of people.

Although many organizational norms—such as always behaving courteously to customers and leaving the work area clean—promote organizational effectiveness, many do not. Studies have shown that groups of employees can develop norms that reduce performance. Several studies have found that work groups can directly control the pace or speed at which work is performed by imposing informal sanctions on employees who break the informal norms governing behavior in a work group. An employee who works too quickly (above group productivity norms) is called a "ratebuster," and an employee who works too slowly (below group norms) is called a "chiseler."[25] Having established a group norm, employees actively enforce it by physically and emotionally punishing violators.

This process occurs at all levels in the organization. Suppose a group of middle managers has adopted the norm of not rocking the organizational boat by changing outdated work rules, even if this will increase efficiency. A new manager who enters the picture will soon learn from the others that rocking the boat does not pay as other managers find ways to punish the new person for violating this norm, even if a little shaking up is what the organization really needs. Even a new manager who is high in the hierarchy will have difficulty changing the informal norms of the organization.

The taken-for-granted way in which norms affect behavior has another consequence for organizational effectiveness. We noted in the Levi Strauss example that even when an organization changes formal work rules, the behavior of people does not change quickly. Why is behavior rigid when rules change? The reason is that rules come to be internalized, that is, they become part of a person's psychological makeup so that *external* rules become *internalized* norms. When this happens, it is very difficult for people to break a familiar rule and follow a new rule; also they will slip back into the old way of behaving. Consider, for example, how difficult it is to keep new resolutions and break bad habits.[26]

Paradoxically, an organization often wants members to buy into a particular set of corporate norms and values. Apple, Google, and Intel, for example, cultivate technical and professional norms and values as a means of controlling and standardizing the behavior of

Design Challenge 4

People in this organization pay too much attention to the rules. Whenever I need somebody to satisfy an unusual customer request or need real quick service from another function, I can't get it because no one is willing to bend or break the rules.

highly skilled organizational members. However, once these norms are established they are very difficult to change. And when an organization wants to pursue new goals and foster new norms, people find it difficult to alter their behavior. There is no easy solution to this problem. Organizational members often have to go through a major period of relearning before they understand that they do not need to apply the old set of internalized norms to new situations. Many companies, such as Ford and IBM, have undergone major upheavals to force their members to "unlearn" outdated norms and to internalize new norms, such as ones that encourage innovation and responsiveness to customers.

Socialization
The process by which organizational members learn the norms of an organization and internalize these unwritten rules of conduct.

The name given to the process by which organizational members learn the norms of an organization and internalize these unwritten rules of conduct is **socialization.**[27] In general, organizations can encourage the development of *standardized* responses or *innovative* ones. Chapter 7 examines these issues in more detail.

Standardization versus Mutual Adjustment

The design challenge facing managers is to find the best ways to use rules and norms to standardize behavior while, at the same time, allowing for mutual adjustment to provide employees with the opportunity to discover new and better ways of achieving organizational goals. Managers facing the challenge of balancing the need for standardization against the need for mutual adjustment need to keep in mind that people at higher levels in the hierarchy and in functions that perform complex, uncertain tasks rely more on mutual adjustment than on standardization to coordinate their actions. For example, an organization wants its accountants to follow standard practices in performing their tasks but in R&D the organization wants to encourage creative behavior that leads to innovation. Many of the integrating mechanisms discussed earlier, such as task forces and teams, can increase mutual adjustment by providing an opportunity for people to meet and work out improved ways of doing things. In addition, an organization can emphasize, as Levi Strauss did, that rules are not set in stone but are just convenient guidelines for getting work done. Managers can also promote norms and values that emphasize change rather than stability. For all organizational roles, however, the appropriate balance between these two variables is one that promotes creative and responsible employee behavior as well as organizational effectiveness, as Focus on Information Technology, Part 3 discusses.

Focus on New Information Technology

Amazon.com, Part 3

How did Jeff Bezos address these design challenges given his need to create a structure to manage an online bookstore that operated through the Internet and never saw its customers, but whose mission was to provide customers a great selection at low prices? Because the success of his venture depended on providing customers with an informative, easy-to-use online storefront, it was vital that customers found Amazon.com's 1-Click checkout system easy and convenient to use and reliable. So, Bezos's design choices were driven by the need to ensure Amazon's software platform linked customers to the organization most effectively.

First, he quickly realized that customer support was the most vital link between customer and organization, so to ensure good customer service he decentralized control and empowered his employees to find ways to meet customer needs quickly. Second, realizing that customers wanted the book quickly, he moved rapidly to develop an efficient distribution and shipping system. Essentially, his main problem was handling inputs into the system (customer requests) and outputs (delivered books). So he developed IT to standardize the work or throughput process to increase efficiency, but he also encouraged mutual adjustment at the input or customer end to improve customers' responsiveness—employees were able to manage exceptions such as lost orders or confused customers as the need arose. (Note that Amazon's IT is also the most important means it uses to integrate cross-functional activities in the organization; IT is the backbone of the company's value-creation activities). Third, because Amazon.com then employed a relatively small number of people—about 2,500 worldwide—Bezos was able to make great use of socialization to coordinate and motivate his employees. Amazon.com employees were carefully selected and socialized by the other members of their functions to help them quickly learn their organizational roles and—most important—Amazon's important norm of providing excellent quality customer service. Finally, to ensure Amazon.com's employees were motivated to provide the best possible customer service, Bezos gives employees stock in the company. Employees currently own over 10% of their company. Amazon.com's rapid growth suggests that Bezos designed an effective organizational structure.

Managerial Implications

The Design Challenges

1. To see whether there is enough integration between your department and the departments that you interact with the most, create a map of the principal integrating mechanisms in use. If there is not enough integration, develop new integrating mechanisms that will provide the extra coordination needed to improve performance.
2. Determine which levels in the managerial hierarchy have responsibility for approving which decisions. Use your findings to decide how centralized or decentralized decision making is in your organization. Discuss your conclusions with your peers, subordinates, and superior to ascertain whether the distribution of authority best suits the needs of your organization.
3. Make a list of your principal tasks and role responsibilities, and then list the rules and SOPs that specify how you are to perform your duties. Using this information, determine the appropriateness of the rules and SOPs, and suggest ways of changing them so you can perform more effectively. If you are a manager, perform this analysis for your department to improve its effectiveness and to make sure the rules are necessary and efficient.
4. Be aware of the informal norms and values that influence the way members of your work group or department behave. Try to account for the origin of these norms and values and the way they affect behavior. Examine whether they fulfill a useful function in your organization. If they do, try to reinforce them. If they do not, develop a plan for creating new norms and values that will enhance effectiveness.

Mechanistic and Organic Organizational Structures

Each design challenge has implications for how an organization as a whole and the people in the organization behave and perform.

Two useful concepts for understanding how managers manipulate all these challenges collectively to influence the way an organizational structure works are the concepts of mechanistic structure and organic structure.[28] The design choices that produce mechanistic and organic structures are contrasted in Figure 4.6 and discussed below.

Figure 4.6 How the Design Challenges Result in Mechanistic or Organic Structures

Mechanistic structures result when an organization makes these choices.	Organic structures result when an organization makes these choices.
• Individual Specialization Employees work separately and specialize in one clearly defined task.	• Joint Specialization Employees work together and coordinate their actions to find the best way of performing a task.
• Simple Integrating Mechanisms Hierarchy of authority is clearly defined and is the major integrating mechanism.	• Complex Integrating Mechanisms Task forces and teams are the major integrating mechanisms.
• Centralization Authority to control tasks is kept at the top of the organization. Most communication is vertical.	• Decentralization Authority to control tasks is delegated to people at all levels in the organization. Most communication is lateral.
• Standardization Extensive use is made of rules and SOPs to coordinate tasks, and work process is predictable.	• Mutual Adjustment Extensive use is made of face-to-face contact to coordinate tasks, and work process is relatively unpredictable.

Mechanistic Structures

Mechanistic structures
Structures that are designed to induce people to behave in predictable, accountable ways.

Mechanistic structures are designed to induce people to behave in predictable, accountable ways. Decision-making authority is centralized, subordinates are closely supervised, and information flows mainly in a vertical direction down a clearly defined hierarchy. In a mechanistic structure, the tasks associated with a role are also clearly defined. There is usually a one-to-one correspondence between a person and a task. Figure 4.7A depicts this situation. Each person is individually specialized and knows exactly what he or she is responsible for, and behavior inappropriate to the role is discouraged or prohibited.

At the functional level, each function is separate, and communication and cooperation among functions are the responsibility of someone at the top of the hierarchy. Thus, in a mechanistic structure, the hierarchy is the principal integrating mechanism both within and between functions. Because tasks are organized to prevent miscommunication, the organization does not need to use complex integrating mechanisms. Tasks and roles are coordinated primarily through standardization, and formal written rules and procedures specify role responsibilities. Standardization, together with the hierarchy, are the main means of organizational control.

Given this emphasis on the vertical command structure, the organization is very status conscious, and norms of "protecting one's turf" are common. Promotion is normally slow, steady, and tied to performance, and each employee's progress in the organization can be charted for years to come. Because of its rigidity, a mechanistic structure is best suited to organizations that face stable environments.

Organic Structures

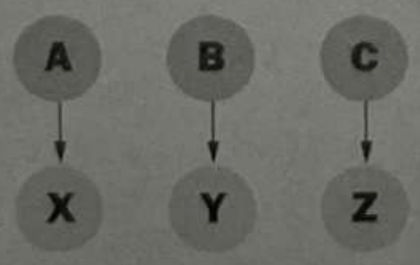
Organic structures
Structures that promote flexibility, so people initiate change and can adapt quickly to changing conditions.

Organic structures are at the opposite end of the organizational design spectrum from mechanistic structures. **Organic structures** promote flexibility, so people initiate change and can adapt quickly to changing conditions.

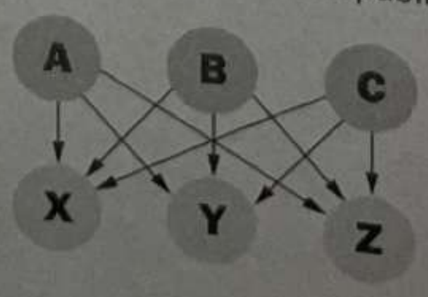
Organic structures are decentralized so that decision-making authority is distributed throughout the hierarchy; people assume the authority to make decisions as organizational needs dictate. Roles are loosely defined and people continually develop new kinds of job skills to perform continually changing tasks. Figure 4.7B depicts this situation. Each person performs all three tasks, and the result is joint specialization and increased productivity. Employees from different functions work together to solve problems; they become involved in one another's activities. As a result, a high level of integration is needed so that employees can share information and overcome problems caused by differences in subunit orientation. The integration of functions is achieved by means of complex mechanisms like task forces and teams (see Figure 4.6). Coordination is achieved through mutual adjustment as people and functions negotiate role definitions and responsibilities, and informal rules and norms emerge from the ongoing interaction of organizational members.

Figure 4.7 Task and Role Relationships

A. Individual Specialization in a Mechanistic Structure. A person in a role specializes in a specific task or set of tasks.



B. Joint Specialization in an Organic Structure. A person in a role is assigned to a specific task or set of tasks. However, the person is able to learn new tasks and develop new skills and capabilities.



This organic approach to decision making is very different from a mechanistic one. For example, in the IBM of the 1990s, its centralized and standardized product development system meant that getting a decision made was, according to one engineer, "like wading through a tub of peanut butter." But as Google has grown quickly in the 2000s there have been complaints that its organic approach that relied heavily on mutual adjustment is being threatened by the increasing number of rules and committees now used to evaluate new product ideas and innovations. As a result, Google has been trying to find new techniques to retain its organic approach and avoid the "peanut butter" problem.

In an organic structure specific norms and values develop that emphasize personal competence, expertise, and the freedom to act in innovative ways. Status is conferred by the ability to provide creative leadership, not by any formal position in the hierarchy and approach encouraged at Google, Netflix, and Apple. Many organizations such as IBM and Ford whose mechanistic structure made job grade, seniority, and loyalty the foundation of their norms and values have suffered in the past because the result is slow and ponderous decision making, and managers who are afraid to rock the boat—but all this has changed in the last several years as their new CEOs have championed an organic approach.

Clearly, organic and mechanistic structures have very different implications for the way people behave. Is an organic structure better than a mechanistic structure? It seems to encourage the kinds of innovative behaviors that are considered desirable: teamwork and self-management to improve quality, customer service, and reduce the time needed to get new products to market. However, would you want to use an organic structure to coordinate the armed forces? Probably not, because of the many authority and status problems that would arise in getting the army, air force, marines, and navy to cooperate. Would you want an organic structure in a nuclear power plant? Probably not, if employees adopt a creative, novel response in an emergency situation or simply make mistakes through human error that may result in a catastrophe. Would you even want an organic structure in a restaurant, in which chefs take the roles of servers and servers take the roles of chefs, and authority and power relationships are worked out on an ongoing basis? Probably not, because the one-to-one correspondence of person and role allows each restaurant employee to perform his or her role in the most effective manner. Conversely, would you want to use a mechanistic structure in a high-tech company like Apple or Google where innovation is a function of the skills and abilities of teams of creative software engineers working jointly on a project? Organizational Insight 4.4 describes how Google has been forced to manage this difficult balancing act as it has grown over the last several years.

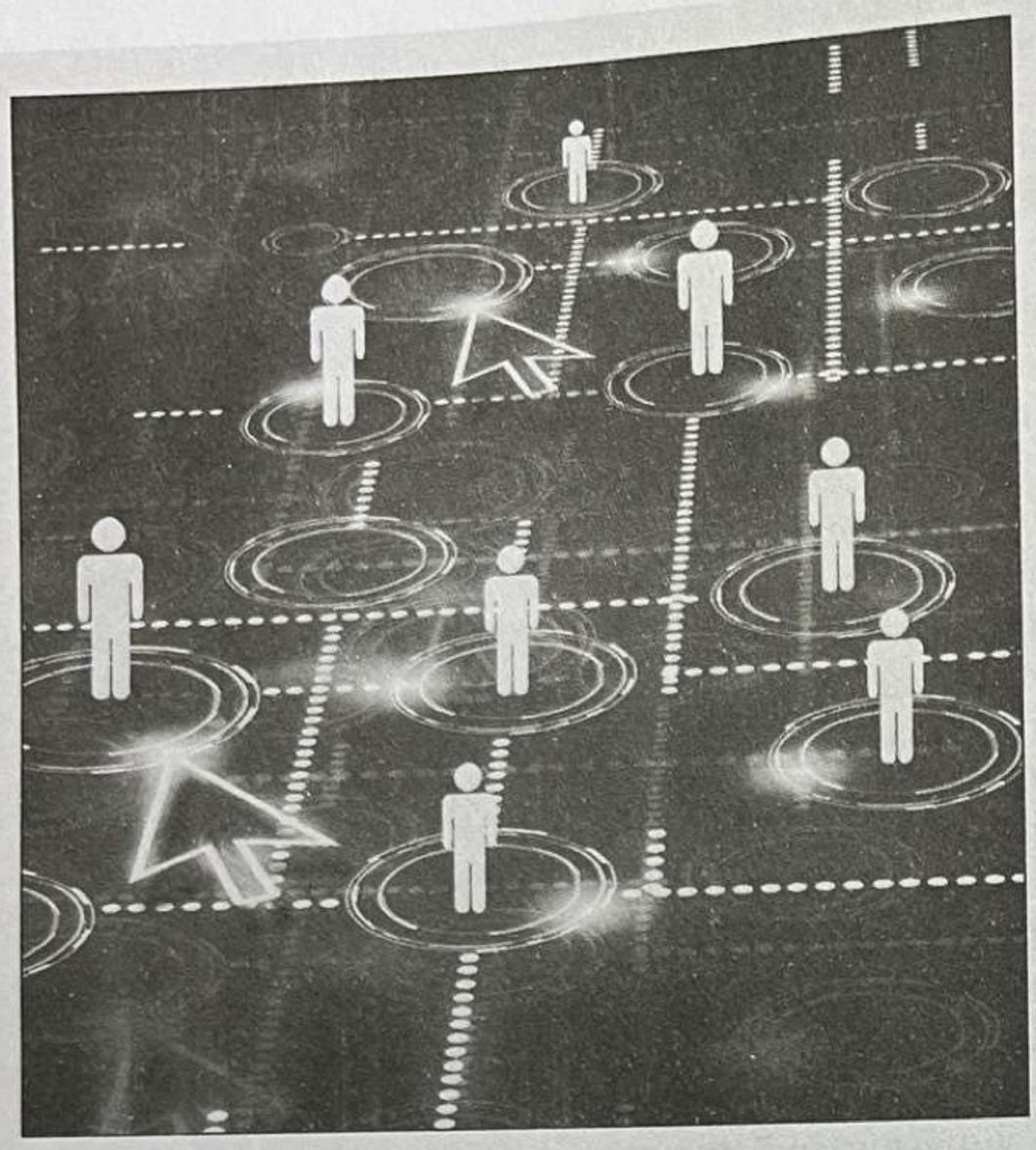
Organizational Insight 4.4

Google Has a Social Networking Problem

Google founders Larry Page and Sergey Brin went to great lengths to create and design an organizational culture for their company that emphasizes innovation—and they still do (see Chapter 7). However, the company's rapid rate of growth added over 80,000 employees in the last three years, and by 2011 it employed over 136,000 people. Google's rapid growth that resulted from its entry into an increasing number of different product markets, such as smartphone software and social networking, led many analysts to claim that Google, despite being entrepreneurial at the level of the product group, had become too bureaucratic at the level of the whole organization.

The issue facing Google was that its product groups had split apart and were now pursuing their own interests. While this had resulted in many major gains, such as its Android software, chrome browser, and ever advancing search and online advertising competences, it was also making many mistakes because overall company goals were not being achieved. This was because the different product groups' activities were often incompatible and at cross-purposes. However, crucially, it was also because each group's relentless attempt to pursue its own interests resulted in the company's attempts to increase its strength in online social networking, such as through its "Google Wave" initiative to compete with Facebook, had all failed.

After Larry Page took over as CEO from Eric Schmidt in 2011, Schmidt admitted that his biggest mistake as CEO was that he had not recognized the major challenge posed by social networking sites such as



Sergej Khakimullin/Shutterstock.com

Twitter and in particular Facebook, whose user base had grown from 40 million users in 2007 to 500,000 million by 2011. Google's search technology cannot search within Facebook's pages, so while Facebook could build up a huge library of specific details about the interests of its members to sell to online advertisers, Google was unable to tap into this goldmine. Why is this so important? Because targeted online advertising is the key to earning higher sales revenues and by 2010 Facebook's own targeted advertising program to its 500 million users was earning it billions of dollars. It seemed that Facebook's rapid growth into online advertising would choke off Google's attempts to remain the leader so they would become fierce competitors in the online advertising market.

So in 2011 the issue facing Larry Page and his top management team was to find ways to reduce bureaucracy at the top in Google to rapidly advance its competence in social networking—it had to find ways to integrate the actions of all its different product groups to promote its competence in social networking. Page created a new top management committee—all the heads of Google's product groups are now required to meet once a week with Page to further integration and mutual adjustment to keep the company on track to succeed in social networking. As Vic Gundotra, who is in charge of Google's secret project to combat the social network Facebook commented, "We needed to get these different product leaders together to find time to talk through all the integration. Every time we increase the size of the company, we need to keep things going to make sure we keep our speed, pace, and passion."[29]

Page's task is not easy because each of Google's product groups are led by strong, charismatic leaders who aggressively pursue their own agendas and the problem is how to get these managers to work together. For example, the Android group must find ways to cooperate with the Chrome group to further social networking, and the search group has to coordinate with the advertising group to find ways to target customers at the city level, like Groupon.

In 2011 this was Google's central challenge. Page made clear how important he views this challenge by linking a substantial part of each top manager's, and the members of each product group's, annual bonus and stock options, worth tens or hundreds of millions of dollars, to how well the company performs in its online social networking initiatives in the future.

Page achieved his goal when at lightning speed Google+ was introduced in the summer of 2011 and had signed up 40 million members by October. Google is doing all it can to respond to the Facebook challenge.

The Contingency Approach to Organizational Design

Contingency approach
A management approach in which the design of an organization's structure is tailored to the sources of uncertainty facing an organization.

The decision about whether to design an organic or a mechanistic structure depends on the *particular context or situation an organization faces*: the environment it confronts, its technology and the complexity of the tasks it performs, and the skills of the people it employs—and how fast these are changing. In general, the contingencies or sources of uncertainty facing an organization shape the organization's design. The **contingency approach** to organizational design tailors organizational structure to the sources of uncertainty facing an organization.[30] The structure is designed to respond to various contingencies—things or changes that might happen and therefore must be planned for. One of the most important of these is the nature of the environment.

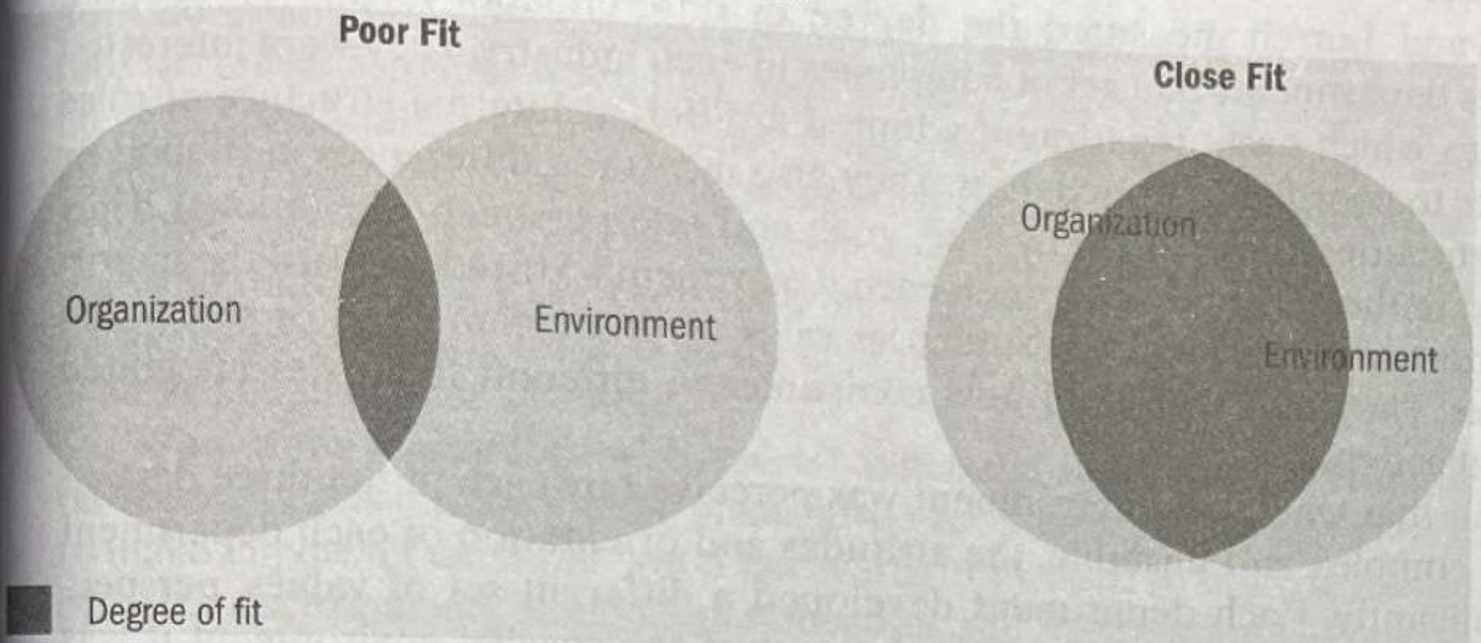
According to contingency theory, in order to manage its environment effectively, an organization should design its structure to fit with the environment in which the organization operates.[31] In other words, an organization must design its *internal* structure to control the *external* environment (see Figure 4.8). A poor fit between structure and environment leads to failure; a close fit leads to success. Support for contingency theory comes from two studies of the relationship between structure and the environment. These studies, conducted by Paul Lawrence and Jay Lorsch, and by Tom Burns and G. M. Stalker, are examined next.

Lawrence and Lorsch on Differentiation, Integration, and the Environment

The strength and complexity of the forces in the general and specific environments have a direct effect on the extent of differentiation inside an organization.[32] The number and size of an organization's functions mirror the organization's needs to manage exchanges

Figure 4.8 The Fit between the Organization and Its Environment

A poor fit leads to failure; a close fit leads to success.

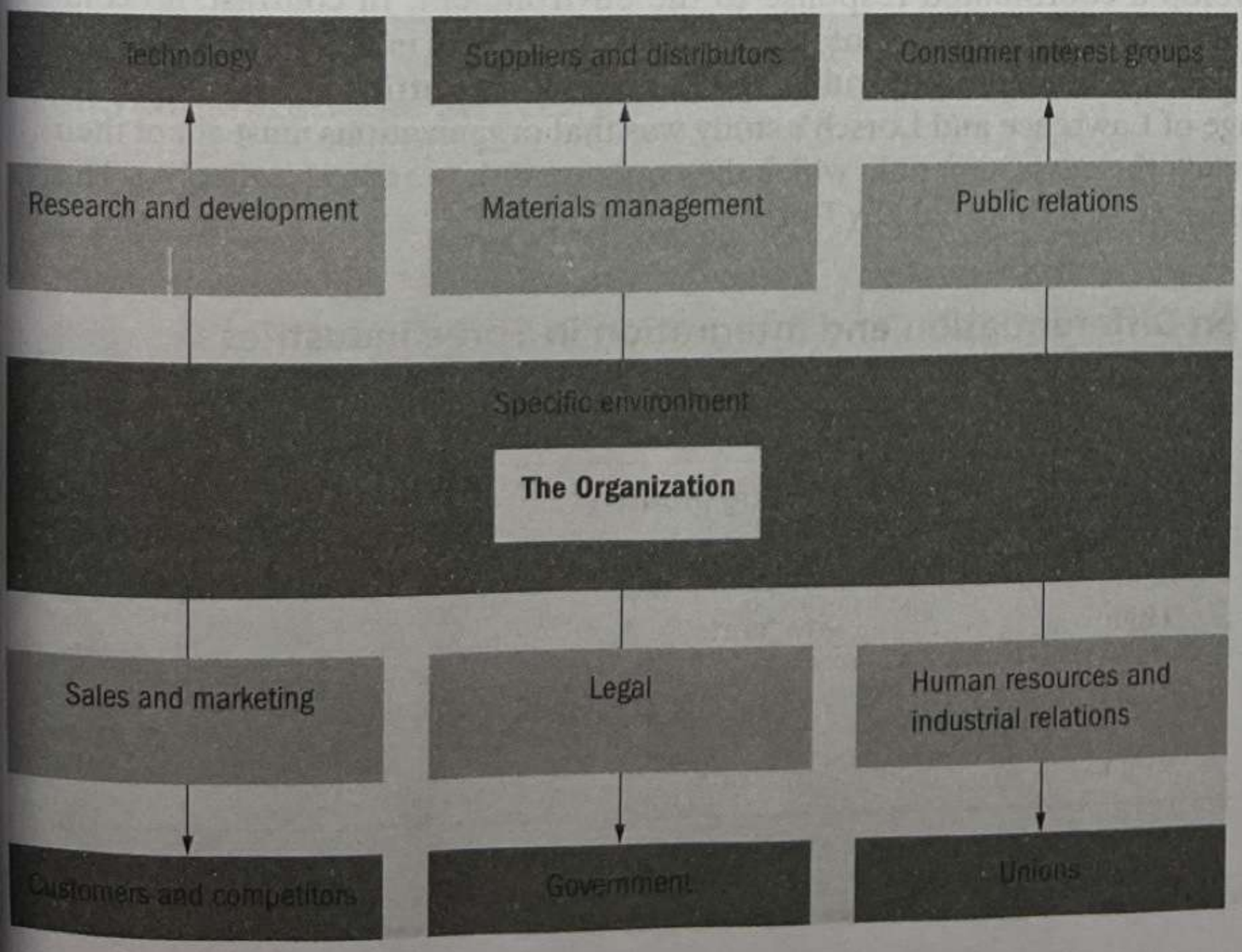


with forces in its environment (see Figure 4.9). Which function handles exchanges with suppliers and distributors? Materials management does. Which function handles exchanges with customers? Sales and marketing. With the government and consumer organizations? Legal and public relations. A functional structure emerges, in part, to deal with the complexity of environmental demands.

Paul Lawrence and Jay Lorsch investigated how companies in different industries differentiate and integrate their structures to fit the characteristics of the industry environment in which they compete.[33] They selected three industries that, they argued, experienced different levels of uncertainty as measured by variables such as rate of change (dynamism) of the environment. The three industries were (1) the plastics industry, which they said experienced the greatest level of uncertainty; (2) the food-processing industry; and (3) the container or can-manufacturing industry, which they said experienced the least uncertainty. Uncertainty was highest in plastics because of the rapid pace of technological and product change. It was lowest in containers, where organizations produce a standard array of products that change little from year to year. Food-processing companies were in

Figure 4.9 Functional Differentiation and Environmental Demands

A functional structure emerges in part to deal with the complexity of demands from the environment.



between because, although they introduce new products frequently, production technology is quite stable.

Lawrence and Lorsch measured the degree of differentiation in the production, R&D, and sales departments of a set of companies in each industry. They were interested in the degree to which each department adopted a different internal structure of rules and procedures to coordinate its activities. They also measured differences in subunit or functional orientations (differences in time, goal, and interpersonal orientations). They were interested in the differences between each department's attitude toward the importance of different organizational goals, such as sales or production goals or short- and long-term goals. They also measured how companies in different industries integrated their functional activities.

They found that when the environment was perceived by each of the three departments as very complex and unstable, the attitudes and orientation of each department diverged significantly. Each department developed a different set of values, perspectives, and way of doing things that suited the part of the specific environment it was dealing with. Thus the extent of differentiation between departments was greater in companies that faced an uncertain environment than in companies that were in stable environments.

Lawrence and Lorsch also found that when the environment is perceived as unstable and uncertain, organizations are more effective if they are less formalized, more decentralized, and more reliant on mutual adjustment. When the environment is perceived as relatively stable and certain, organizations are more effective if they have a more centralized, formalized, and standardized structure. Moreover, they found that effective companies in different industries had levels of integration that matched their levels of differentiation. In the uncertain plastics industry, highly effective organizations were highly differentiated but were also highly integrated. In the relatively stable container industry, highly effective companies had a low level of differentiation, which was matched by a low level of integration. Companies in the moderately uncertain food-processing industry had levels of differentiation and integration in between the other two. Table 4.2 summarizes these relationships.

As Table 4.2 shows, a complex, uncertain environment (such as the plastics industry) requires that different departments develop different orientations toward their tasks (a high level of differentiation) so that they can deal with the complexity of their specific environment. As a result of this high degree of differentiation, such organizations require more coordination (a high level of integration). They make greater use of integrating roles between departments to transfer information so the organization as a whole can develop a coordinated response to the environment. In contrast, no complex integrating mechanisms such as integrating roles are found in companies in stable environments because the hierarchy, rules, and SOPs provide sufficient coordination.

The message of Lawrence and Lorsch's study was that organizations must adapt their structures to match the environment in which they operate if they are to be effective. This conclusion reinforced that of a study by Burns and Stalker.

TABLE 4.2 The Effect of Uncertainty on Differentiation and Integration in Three Industries

	Degree of Uncertainty		
Variable	Plastics Industry	Food-Processing Industry	Container Industry
Environmental Variable			
Uncertainty (complexity dynamism, richness)	High ←	Moderate	→ Low
Structural Variables			
Departmental differentiation	High ←	Moderate	→ Low
Cross-functional integration	High ←	Moderate	→ Low

Burns and Stalker on Organic versus Mechanistic Structures and the Environment

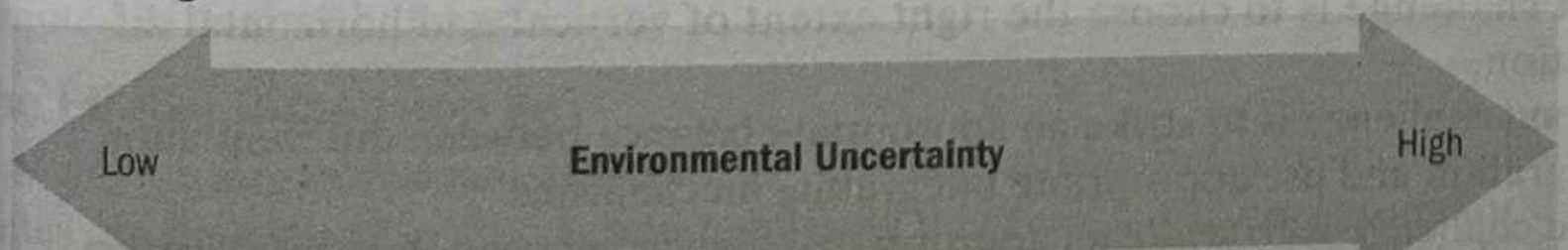
Tom Burns and G. M. Stalker also found that organizations need different kinds of structure to control activities when they need to adapt and respond to change in the environment.[34] Specifically, they found that companies with an organic structure were more effective in unstable, changing environments than were companies with a mechanistic structure. The reverse was true in a stable environment: There, the centralized, formalized, and standardized way of coordinating and motivating people that is characteristic of a mechanistic structure worked better than the decentralized team approach that is characteristic of an organic structure.

What is the reason for those results? When the environment is rapidly changing and on-the-spot decisions have to be made, lower-level employees need to have the authority to make important decisions—in other words, they need to be empowered. Moreover, in complex environments, rapid communication and information sharing are often necessary to respond to customer needs and develop new products.[35] When the environment is stable, in contrast, there is no need for complex decision-making systems. Managing resource transactions is easy, and better performance can be obtained by keeping authority centralized in the top-management team and using top-down decision making. Burns and Stalker's conclusion was that organizations should design their structure to match the dynamism and uncertainty of their environment. Figure 4.10 summarizes the conclusions from Burns and Stalker's and Lawrence and Lorsch's contingency studies.

Later chapters examine in detail how to choose the appropriate organizational structure to meet different strategic and technological contingencies. For now, it is important to realize that mechanistic and organic structures are ideals: They are useful for examining how organizational structure affects behavior, but they probably do not exist in a pure form in any real-life organization. Most organizations are a mixture of the two types. Indeed, according to one increasingly influential view organizational design, the most successful organizations are those that have achieved a balance between the two, so that they are simultaneously mechanistic and organic.

An organization may tend more in one direction than in the other, but it needs to be able to act in both ways to be effective. The army, for example, is well known for having a mechanistic structure in which hierarchical reporting relationships are clearly specified. However, in wartime, this mechanistic command structure allows the army to become organic and flexible as it responds to the uncertainties of the quickly changing battlefield.

Figure 4.10 The Relationship between Environmental Uncertainty and Organizational Structure



Mechanistic Structure	Organic Structure
Simple structure	Complex structure
Low differentiation	High differentiation
Low integration	High integration
Centralized decision making	Decentralized decision making
Standardization	Mutual adjustment

Similarly, an organization may design its structure so that some functions (such as manufacturing and accounting) act in a mechanistic way and others (marketing or R&D) develop a more organic approach to their tasks. To achieve the difficult balancing act of being simultaneously mechanistic and organic, organizations need to make appropriate choices (see Figure 4.6). In the next three chapters we look in more detail at the issues involved in designing organizational structure and culture to improve organizational effectiveness.

Studies by Lawrence and Lorsch and by Burns and Stalker indicate that organizations should adapt their structure to reflect the degree of uncertainty in their environment. Companies with a mechanistic structure tend to fare best in a stable environment. Those with an organic structure tend to fare best in an unstable, changing environment.

Summary

This chapter has analyzed how managers' responses to several organizational design challenges affect the way employees behave and interact and how they respond to the organization. We have analyzed how differentiation occurs and examined three other challenges that managers confront as they try to structure their organization to achieve organizational goals. Chapter 4 has made the following main points:

1. Differentiation is the process by which organizations evolve into complex systems as they allocate people and resources to organizational tasks and assign people different levels of authority.
2. Organizations develop five functions to accomplish their goals and objectives: support, production, maintenance, adaptive, and managerial.
3. An organizational role is a set of task-related behaviors required of an employee. An organization is composed of interlocking roles that are differentiated by task responsibilities and task authority.
4. Differentiation has a vertical and a horizontal dimension. Vertical differentiation refers to the way an organization designs its hierarchy of authority. Horizontal differentiation refers to the way an organization groups roles into subunits (functions and divisions).
5. Managers confront five design challenges as they coordinate organizational activities. The choices they make are interrelated and collectively determine how effectively an organization operates.
6. The first challenge is to choose the right extent of vertical and horizontal differentiation.
7. The second challenge is to strike an appropriate balance between differentiation and integration and use appropriate integrating mechanisms.
8. The third challenge is to strike an appropriate balance between the centralization and decentralization of decision-making authority.
9. The fourth challenge is to strike an appropriate balance between standardization and mutual adjustment by using the right amounts of formalization and socialization.
10. Different organizational structures cause individuals to behave in different ways. Mechanistic structures are designed to cause people to behave in predictable ways. Organic structures promote flexibility and quick responses to changing conditions. Successful organizations strike an appropriate balance between mechanistic and organic structures.
11. Contingency theory argues that to manage its environment effectively, an organization should design its structure and control systems to fit with the environment in which the organization operates.

Discussion Questions

1. Why does differentiation occur in an organization? Distinguish between vertical and horizontal differentiation.
2. Draw an organizational chart of the business school or college that you attend. Outline its major roles and functions. How differentiated is it? Do you think the distribution of authority and division of labor are appropriate?
3. When does an organization need to use complex integrating mechanisms? Why?
4. What factors determine the balance between centralization and decentralization, and between standardization and mutual adjustment?
5. Under what conditions is an organization likely to prefer (a) a mechanistic structure, (b) an organic structure, or (c) elements of both?

Organizational Theory in Action

Practicing Organizational Theory

Growing Pains

Form groups of three to five people and discuss the following scenario:

You are the founding entrepreneurs of Zylon Corporation, a fast-growing Internet software company that specializes in electronic banking. Customer demand to license your software has boomed so much that in just two years you have added over 50 new software programmers to help develop a new range of software products. The growth of your company has been so swift that you still operate informally with a loose and flexible arrangement of roles, and programmers are encouraged to find solutions to problems as they go along. Although this structure has worked well, signs indicate that problems are arising.

There have been increasing complaints from employees that good performance is not being recognized in the organization and that they do not feel equitably treated. Moreover, there have been complaints about getting managers to listen to their new ideas and to act on them. A bad atmosphere seems to be developing in the company, and recently several talented employees left. You are meeting to discuss these problems.

1. Examine your organizational structure to see what might be causing these problems.
2. What kinds of design choices do you need to make to solve them?

Making the Connection #4

Find an example of a company that has been facing one of the design challenges discussed in this chapter. What problem has the company been experiencing? How has it attempted to deal with the problem?

The Ethical Dimension #4

The way an organizational structure is designed affects the way its members behave. Rules can be applied so strictly and punitively that they harm employees, for example by increasing the stress of the job. Inappropriate norms can develop that might reduce employee incentive to work or cause employees to abuse their peers. Similarly, in some organizations, superiors use their authority to abuse and harangue employees. Think about the ethical implications of the design challenges discussed in this chapter.

1. Using the design challenges, design an organization that you think would result in highly ethical decision making; then design one that would lead to the opposite. Why the difference?
2. Do you think ethical behavior is more likely in a mechanistic or an organic structure?

Analyzing the Organization: Design Module #4

This module attempts to get at some of the basic operating principles that your organization uses to perform its tasks. From the information you have been able to obtain, describe the aspects of your organization's structure in the assignment below.

Assignment

1. How differentiated is your organization? Is it simple or complex? List the major roles, functions, or departments in your organization. Does your organization have many divisions? If your organization engages in many businesses, list the major divisions in the company.
2. What core competences make your organization unique or different from other organizations? What are the sources of the core competences? How difficult do you think it would be for other organizations to imitate these distinctive competences?
3. How has your organization responded to the design challenges? (a) Is it centralized or decentralized? How do you know? (b) Is it highly differentiated? Can you identify any integrating mechanisms used by your organization? What is the match between the complexity of differentiation and the complexity of the integrating mechanisms that are used? (c) Is behavior in the organization very standardized, or does mutual adjustment play an important role in coordinating people and activities? What can you tell about the level of formalization by looking at the number and kinds of rules the organization uses? How important is socialization in your organization?
4. Does your analysis in item 3 lead you to think that your organization conforms more to the organic or to the mechanistic model of organizational structure? Briefly explain why you think it is organic or mechanistic.
5. From your analysis so far, what do you think could be done to improve the way your organization operates?

CASE FOR ANALYSIS

Sony's "Gaijin" CEO is Reorganizing the Company

Sony, the famous Japanese electronics maker, was renowned in the 1990s for using its engineering prowess to develop blockbuster new products such as the Walkman, Trinitron TV, and PlayStation. Its engineers churned out an average of four new product ideas every day, something attributed to its culture, called the "Sony Way," which emphasized communication, cooperation, and harmony among its company-wide product engineering teams.[36] Sony's engineers were empowered to pursue their own ideas, and the leaders of its different divisions, and hundreds of product teams were allowed to pursue their own innovations—no matter what the cost. While this approach to leadership worked so long as Sony could churn out blockbuster products, it did not work in the 2000s as agile global competitors from Taiwan, Korea, and the United States innovated new technologies and products that began to beat Sony at its own game.

Companies such as LG, Samsung, and Apple innovated new technologies such as advanced LCD flat-screens, flash memory, touch-screen commands, mobile digital music, video, and GPS positioning devices, and 3D displays that made many of Sony's technologies, such as its Trinitron TVs and Walkmans obsolete. For example, products such as Apple's iPod and iPhone and Nintendo's Wii game console better met customer needs than Sony's out-of-date and expensive products. Why did Sony lose its leading competitive position?

One reason was that Sony's organizing approach no longer worked in its favor because the leaders of its different product divisions worked to protect their own personal empires and divisions' goals and not those of the whole company. Sony's leaders were slow to recognize the speed at which technology was changing and as each division's performance fell, their leaders felt threatened and competition between them increased as they sought to protect their own empires. The result was slower decision making and increased operating costs as the leaders of each division competed to obtain the funding necessary to develop successful new products.

By 2005 Sony was in big trouble; and at this crucial point in their company's history, Sony's top managers turned to a *gaijin,* or non-Japanese, executive to lead their company. Their choice was Sir Howard Stringer, a Welshman, who as the head of Sony's U.S. operations had been instrumental in cutting costs and increasing profits. Stringer's was known to be a directive but participative leader; although he was closely involved in all U.S. top management decisions he nevertheless then gave his top executives the authority to develop successful strategies to implement these decisions.

When he became Sony's CEO in 2005 Stringer faced the immediate problem of reducing operating costs that were *double* those of its competitors because the leaders of its divisions had essentially seized control of Sony's top-level decision-making authority. Stringer immediately recognized how the extensive power struggles among the leaders of Sony's different product divisions were hurting the company. So, adopting a directive, command-and-control leadership approach, he made it clear that this had to stop and that they needed to work quickly to reduce costs—but he also urged them to cooperate to speed product development across divisions. By 2007 it was clear that many of Sony's most important divisional leaders were still pursuing their own goals and were ignoring Stringer's orders.

By 2008 Stringer had replaced all the divisional leaders who resisted his orders, and he worked steadily to downsize Sony's bloated corporate headquarters staff and replace the leaders of functions who also put their own interests first. He promoted younger managers to lead its divisions and functions—managers who would obey his orders and focus on the company's performance because as Stringer said over time the culture or business of Sony had been management—not making new products.

To turn around Sony's still declining performance, Stringer had to adopt an even more directive approach. In 2009 Stringer announced he would take charge of the Japanese company's struggling core electronics group and would add the title of president to his existing roles as chairman and CEO as he reorganized Sony's divisions. He also replaced four more of its most important leaders with managers who had held positions outside Japan and were "familiar with the digital world." In the future, he also told managers to prioritize new products and invest only in those with the greatest chance of success so Sony could reduce its out-of-control R&D costs.

By 2010 Sony's financial results suggested that Stringer's initiatives were finally paying off; he had stemmed Sony's huge losses, its products were selling better, and Stringer hoped Sony would become profitable by the end of 2011. To help ensure this Stringer also took charge of a newly created networked products and services group that included its Vaio computers, Walkman digital media players, PlayStation gaming console, and the software and online services to support these products. Stringer's organizing approach was still focused on helping Sony regain its global leadership in electronic products.[37]

In January 2011 Stringer announced that Sony's performance had increased so much that it would be profitable in the second half of 2011. Then within months came the news that hackers had invaded Sony's Playstation website and stolen the private information of millions of its users. Sony was forced to shut down its Playstation website for weeks and compensate users, and together it expects the losses from this debacle to exceed $1 billion as well as the cost to its brand name. In addition, it also became clear that customers were not buying its expensive new 3D flatscreen TVs and that its revenues from consumer products would be lower than expected because of intense competition from companies like Samsung. In June 2011 Stringer reported that now the company expected to make a record loss in 2011, so his turnaround efforts have been foiled so far.

Discussion Questions

1. What pressures and forces from the environment led Stringer to change the balance between centralizing and decentralizing authority at Sony?
2. How would you describe Stringer's approach to organizing? Is he seeking to create a more mechanistic or organic structure, or what kind of balance between them?

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